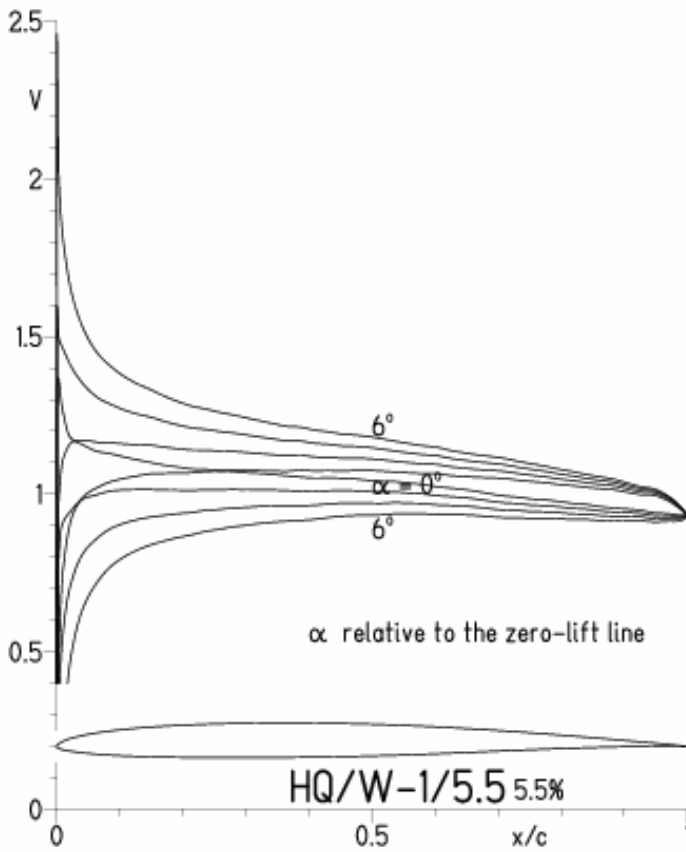


HQ/W-1/5,5 (Jet), N=11, Profil für Jetmodelle und sehr schnelle DS-Segler

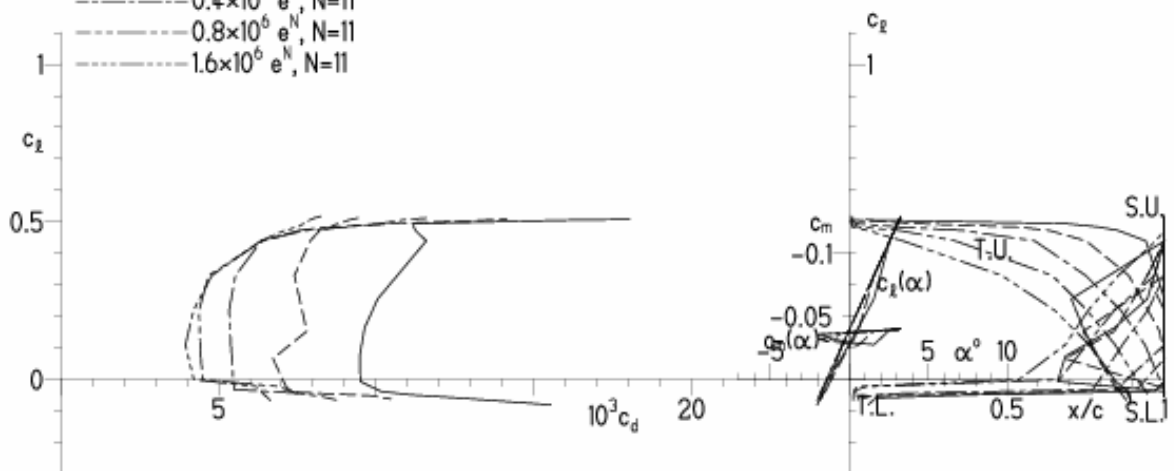
EPPLER 2005 V. 8.5.07 RUN 1.6.11 10:19



EPPLER 2005 V. 8.5.07 RUN 1.6.11 10:19

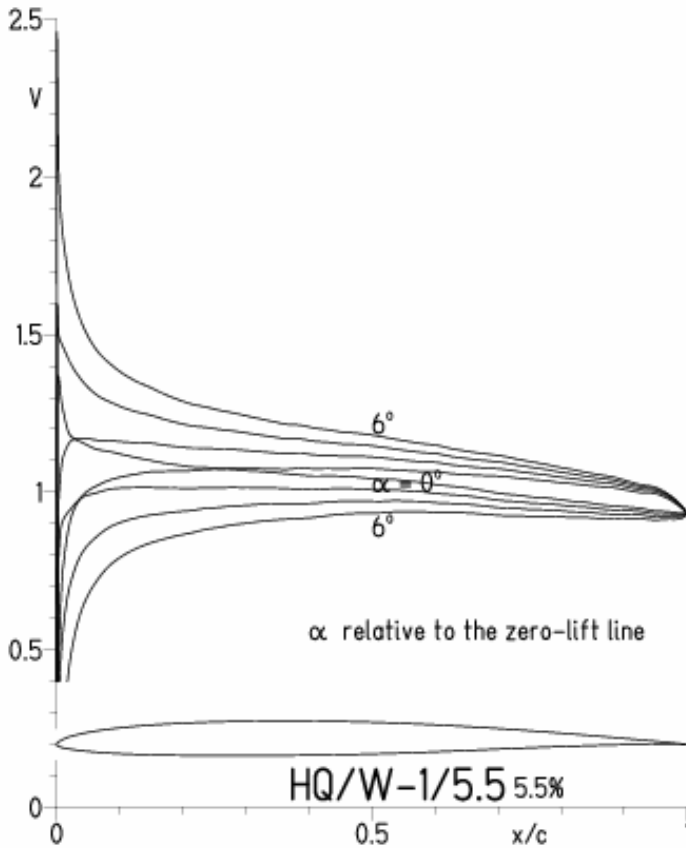
HQ/W-1/5.5 5.5%

- $Re = 0.1 \times 10^6 e^N, N=11$
- - -  $0.2 \times 10^6 e^N, N=11$
- · -  $0.4 \times 10^6 e^N, N=11$
- · - ·  $0.8 \times 10^6 e^N, N=11$
- · - · -  $1.6 \times 10^6 e^N, N=11$



HQ/W-1/5,5 (Jet), N=9, Profil für Jetmodelle und sehr schnelle DS-Segler

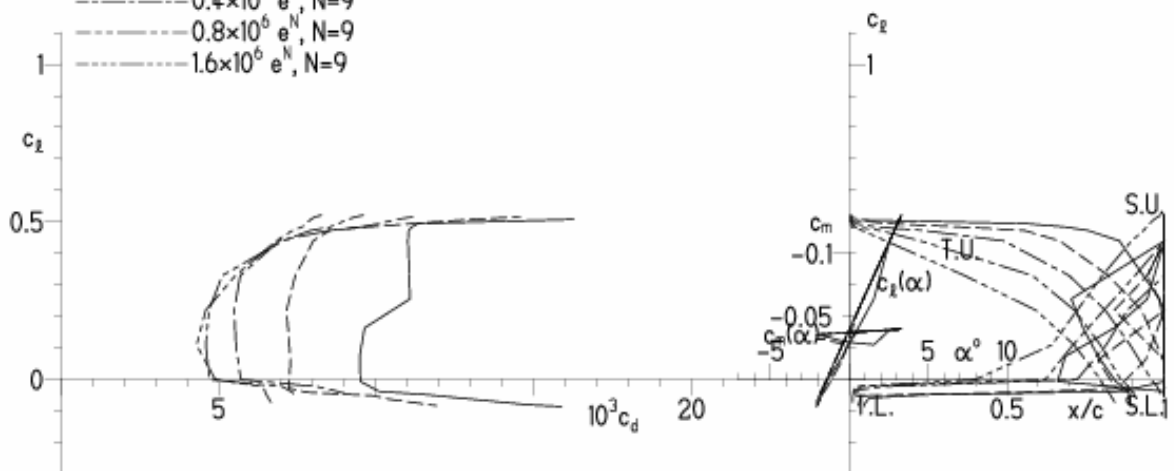
EPPLER 2005 V. 8.5.07 RUN 1.6.11 10:29



EPPLER 2005 V. 8.5.07 RUN 1.6.11 10:29

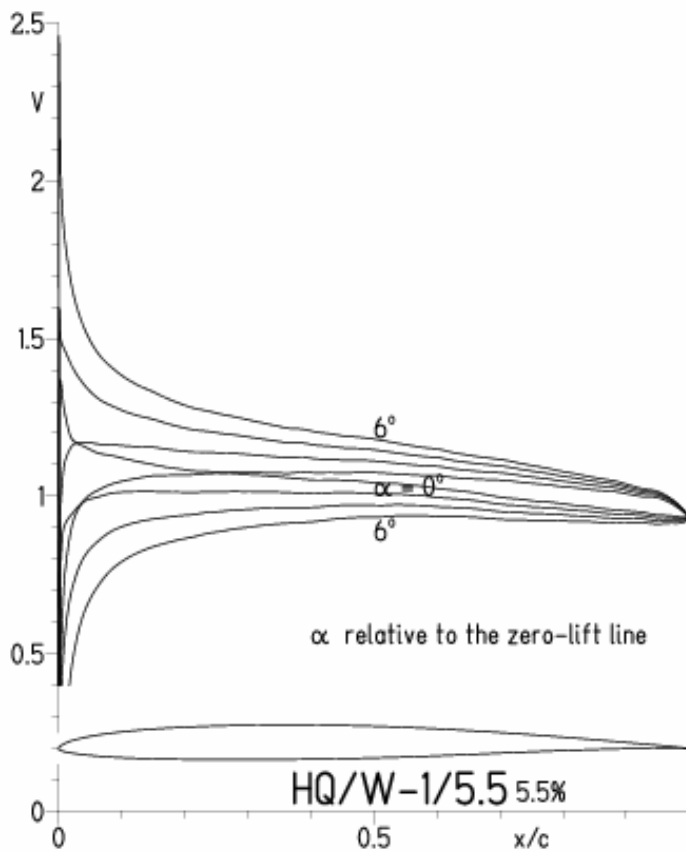
HQ/W-1/5.5 5.5%

- $Re = 0.1 \times 10^6 e^N, N=9$
- - -  $0.2 \times 10^6 e^N, N=9$
- · -  $0.4 \times 10^6 e^N, N=9$
- · - ·  $0.8 \times 10^6 e^N, N=9$
- · - · -  $1.6 \times 10^6 e^N, N=9$



# HQ/W-1/5,5 (Jet), N=9, Turbulatoreffekt (optimal beim Maximum der Wölbung)

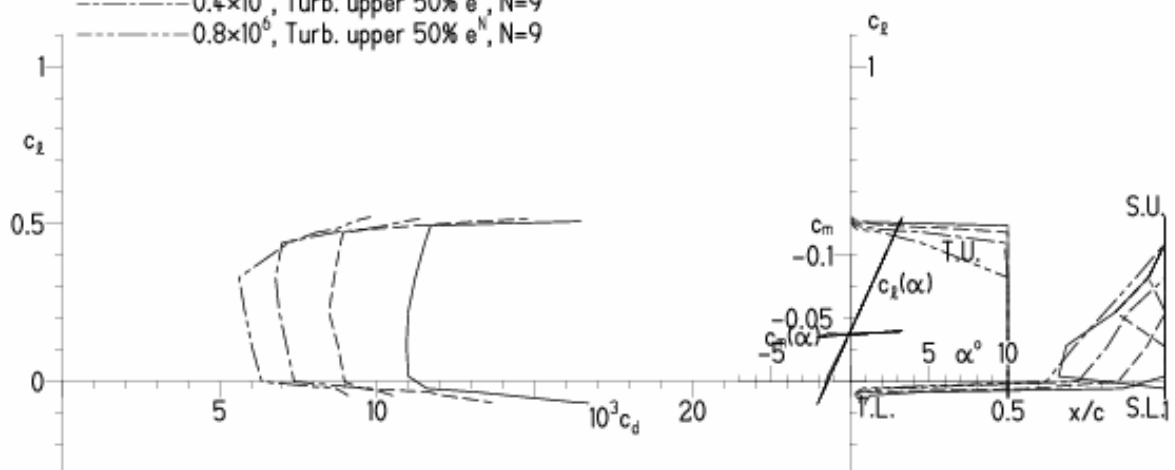
EPPLER 2005 V. 8.5.07 RUN 1.6.11 10:34



EPPLER 2005 V. 8.5.07 RUN 1.6.11 10:34

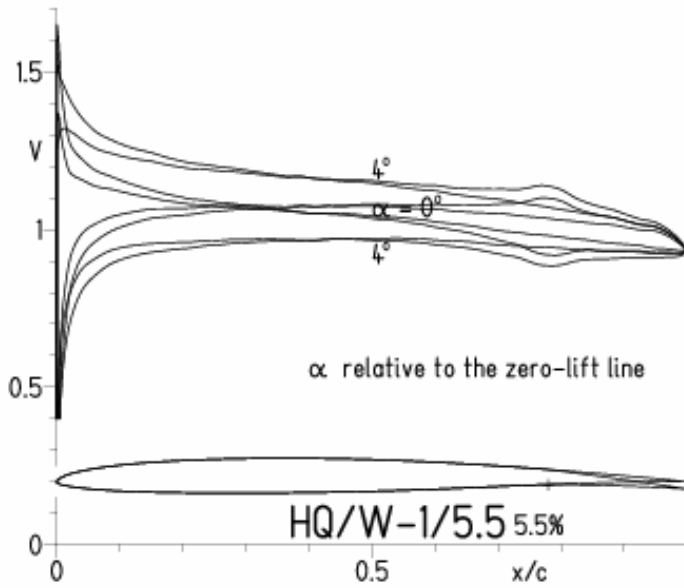
## HQ/W-1/5.5 5.5%

- $Re = 0.1 \times 10^6$ , Turb. upper 50%  $e^N$ , N=9
- - -  $0.2 \times 10^6$ , Turb. upper 50%  $e^N$ , N=9
- · -  $0.4 \times 10^6$ , Turb. upper 50%  $e^N$ , N=9
- - -  $0.8 \times 10^6$ , Turb. upper 50%  $e^N$ , N=9

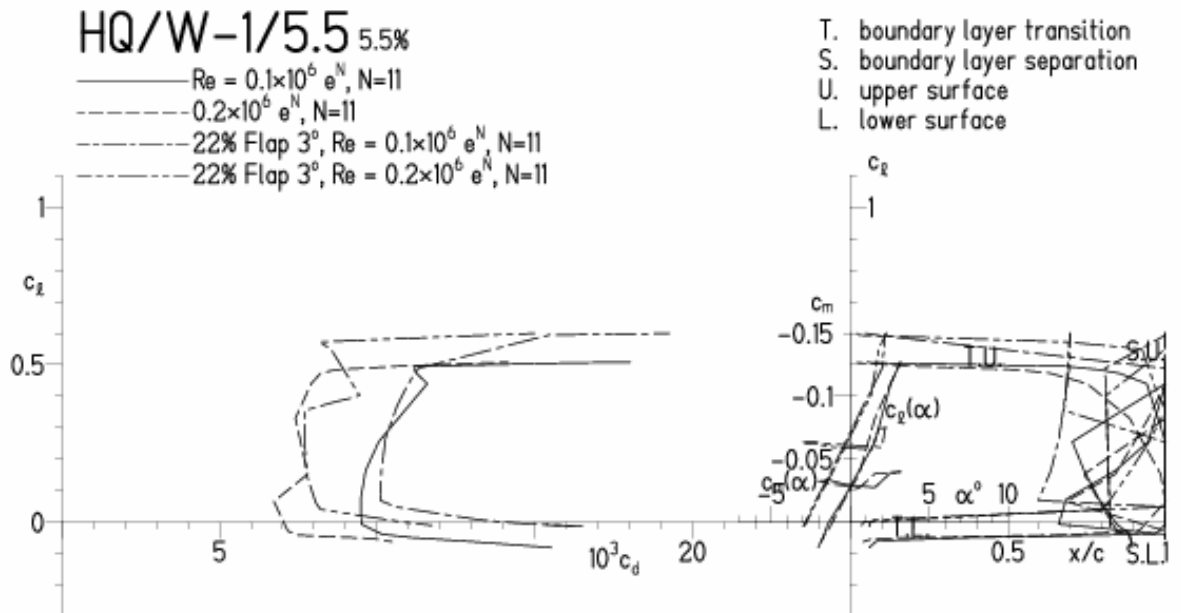


HQ/W-1/5,5 (Jet), N=11, mit +3° Wölbklappenausschlag

EPPLER 2005 V. 8.5.07 RUN 1.6.11 11:05

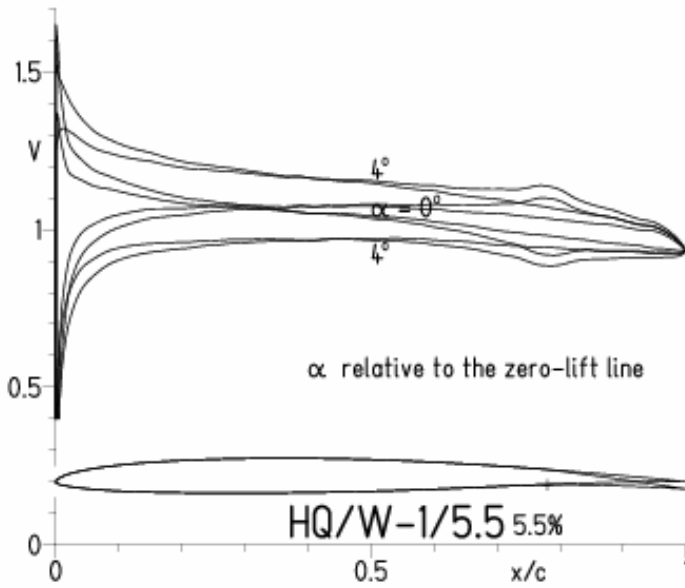


EPPLER 2005 V. 8.5.07 RUN 1.6.11 11:05

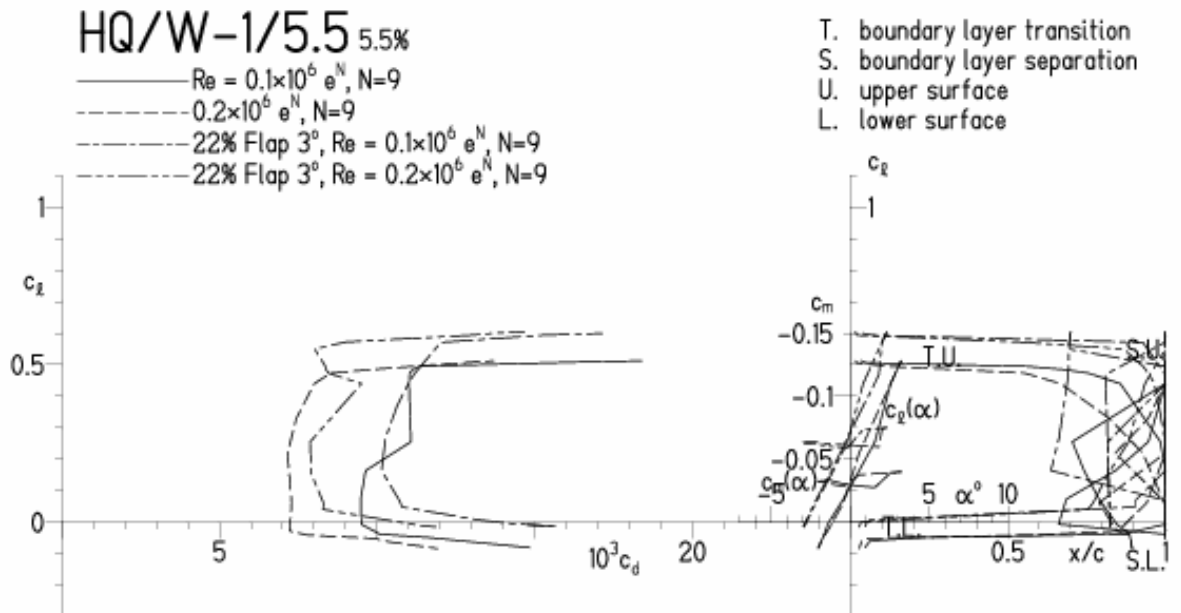


HQ/W-1/5,5 (Jet), N=9, mit +3° Wölbklappenausschlag

EPPLER 2005 V. 8.5.07 RUN 1.6.11 11:15

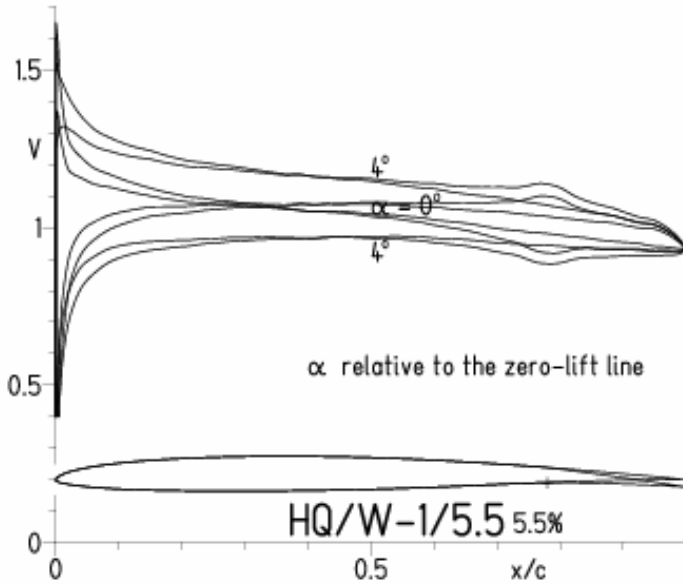


EPPLER 2005 V. 8.5.07 RUN 1.6.11 11:15



HQ/W-1/5,5 (Jet), N=9, mit +3° Wölbklappenausschlag, Turbulatoreffekt  
 (Verbesserungen für niedrige Geschwindigkeiten und Profiltiefen an Flügelenden)

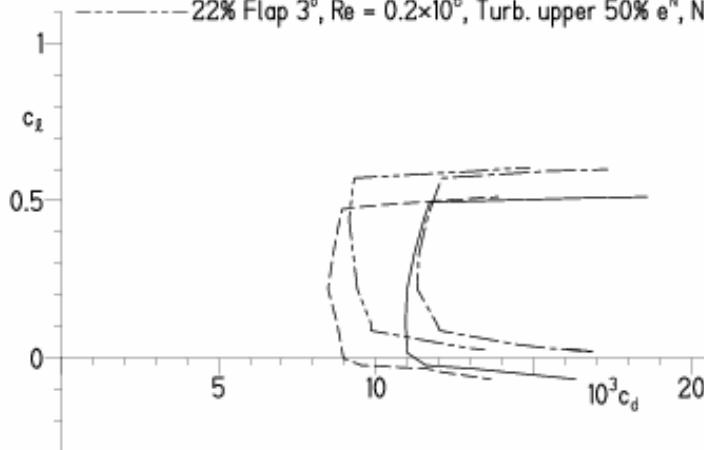
EPPLER 2005 V. 8.5.07 RUN 1.6.11 11:19



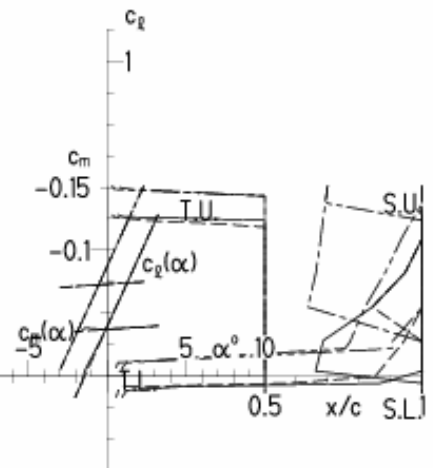
EPPLER 2005 V. 8.5.07 RUN 1.6.11 11:19

HQ/W-1/5.5 5.5%

- $Re = 0.1 \times 10^6$ , Turb. upper 50%  $e^N$ ,  $N=9$
- - -  $0.2 \times 10^6$ , Turb. upper 50%  $e^N$ ,  $N=9$
- · - · 22% Flap  $3^\circ$ ,  $Re = 0.1 \times 10^6$ , Turb. upper 50%  $e^N$ ,  $N=9$
- · - · 22% Flap  $3^\circ$ ,  $Re = 0.2 \times 10^6$ , Turb. upper 50%  $e^N$ ,  $N=9$

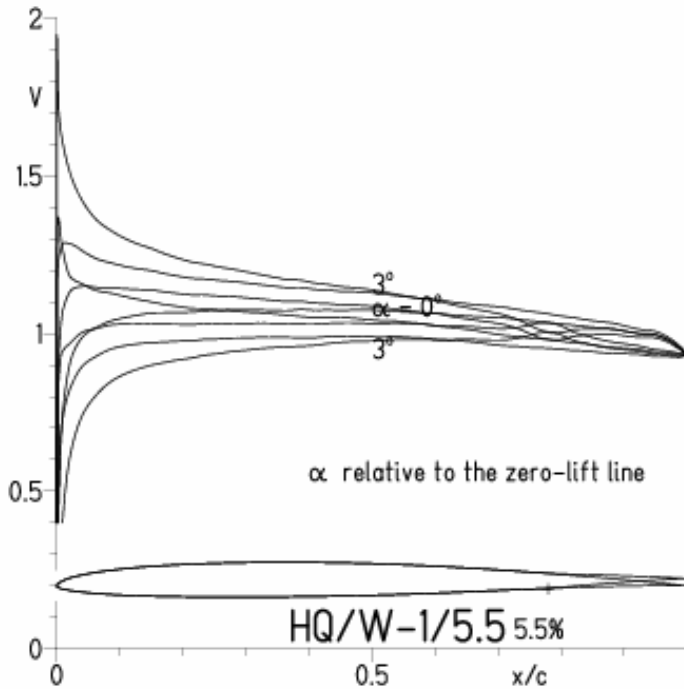


- T. boundary layer transition
- S. boundary layer separation
- U. upper surface
- L. lower surface

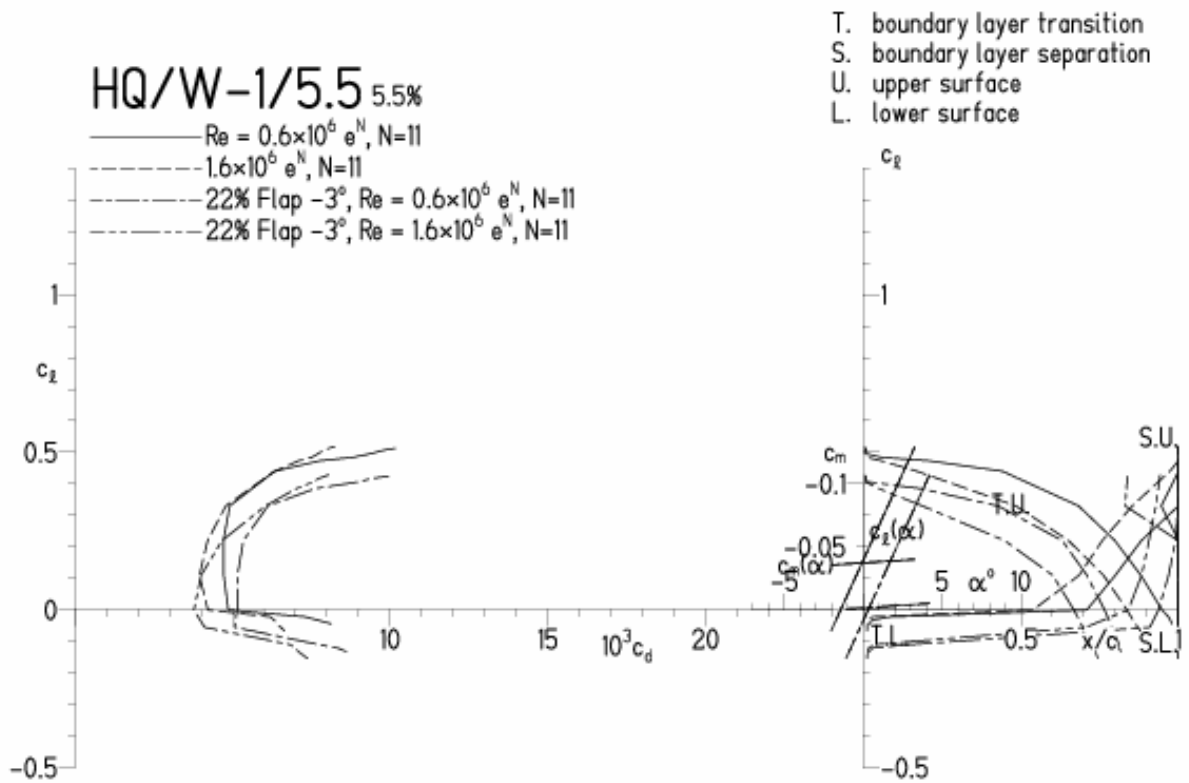


HQ/W-1/5.5, N=11, mit  $-3^\circ$  Wölbklappenausschlag  
 (Jet- und Segelmodelle haben damit das Potential für sehr hohe Endgeschwindigkeiten)

EPPLER 2005 V. 8.5.07 RUN 1.6.11 11:51

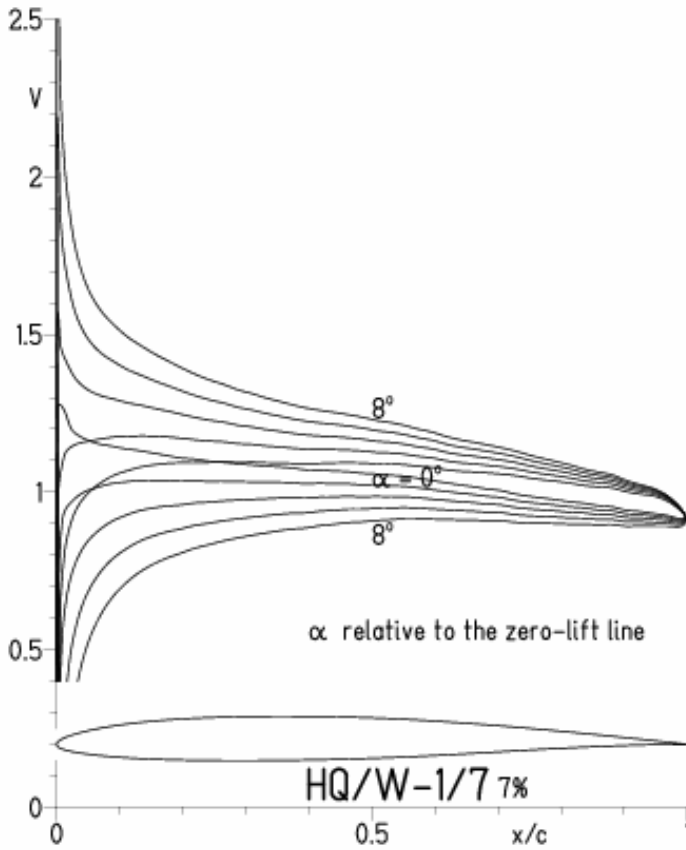


EPPLER 2005 V. 8.5.07 RUN 1.6.11 11:51



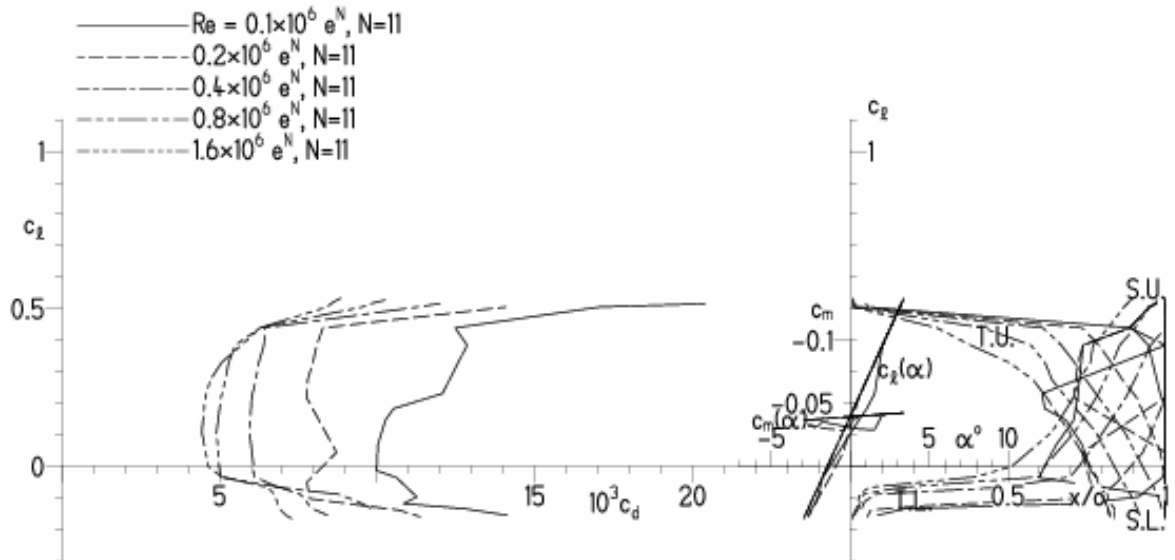
HQ/W-1/7, N=11

EPPLER 2005 V. 8.5.07 RUN 5.5.11 17:20



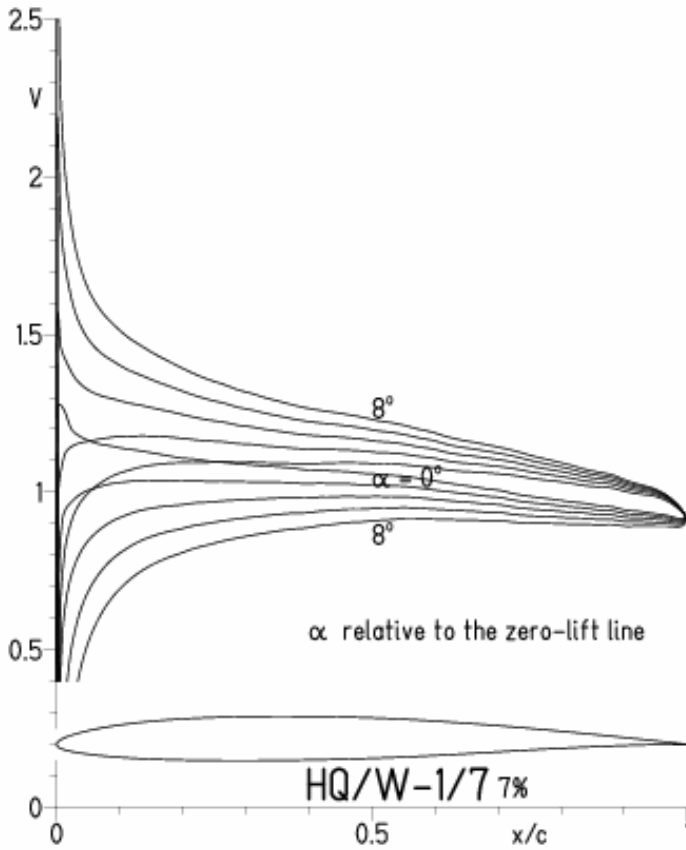
EPPLER 2005 V. 8.5.07 RUN 5.5.11 17:20

HQ/W-1/7 7%



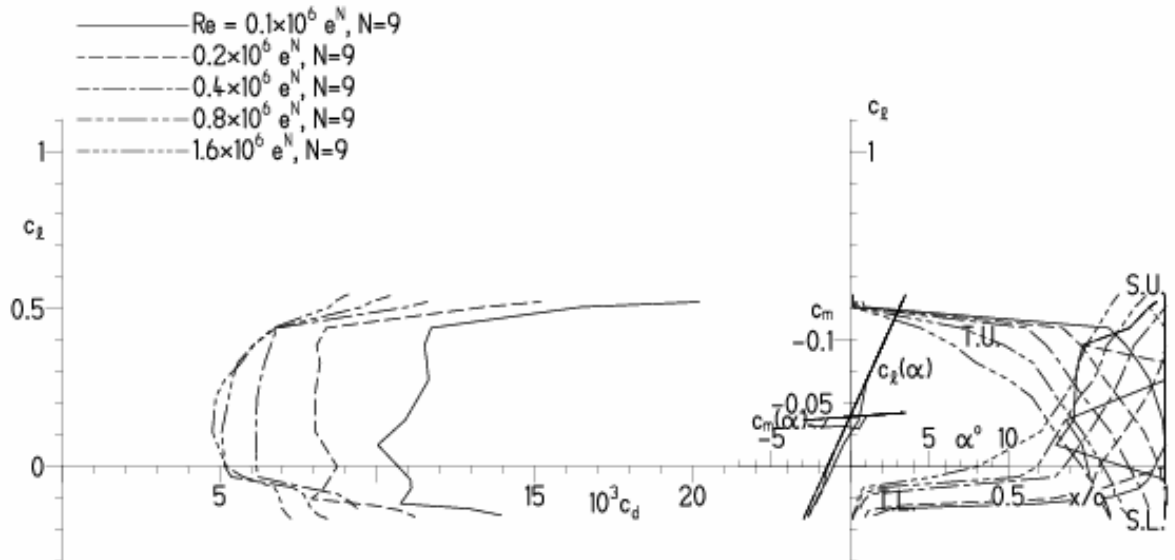
HQ/W-1/7, N=9

EPPLER 2005 V. 8.5.07 RUN 5.5.11 17:34



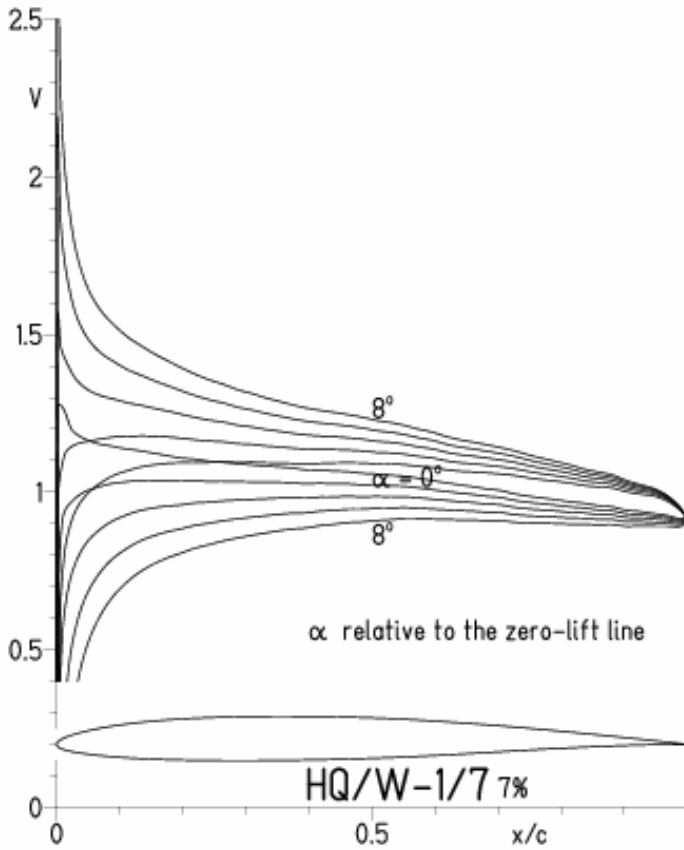
EPPLER 2005 V. 8.5.07 RUN 5.5.11 17:34

HQ/W-1/7 7%



HQ/W-1/7, N=9, Turbulatoreffekt (optimal beim Maximum der Wölbung)

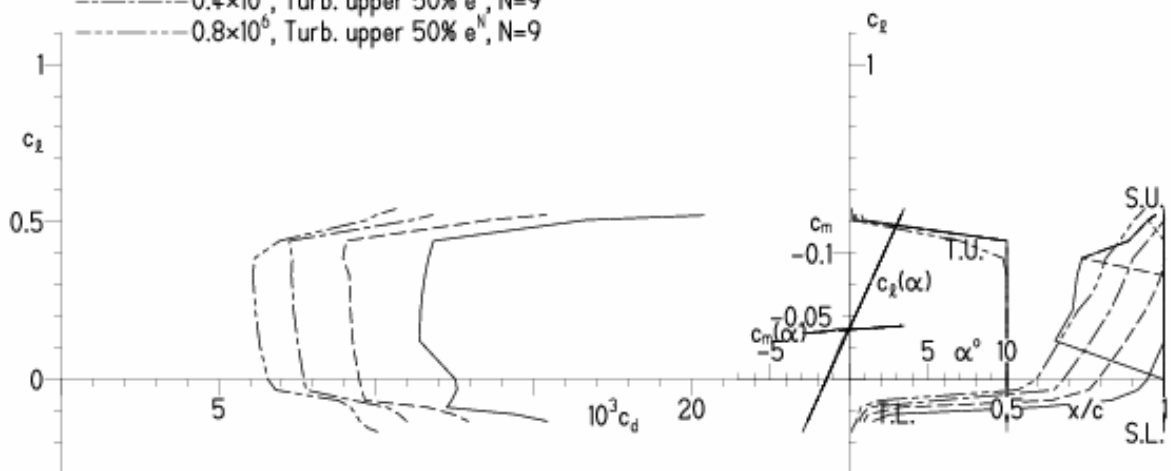
EPPLER 2005 V. 8.5.07 RUN 5.5.11 17:38



EPPLER 2005 V. 8.5.07 RUN 5.5.11 17:38

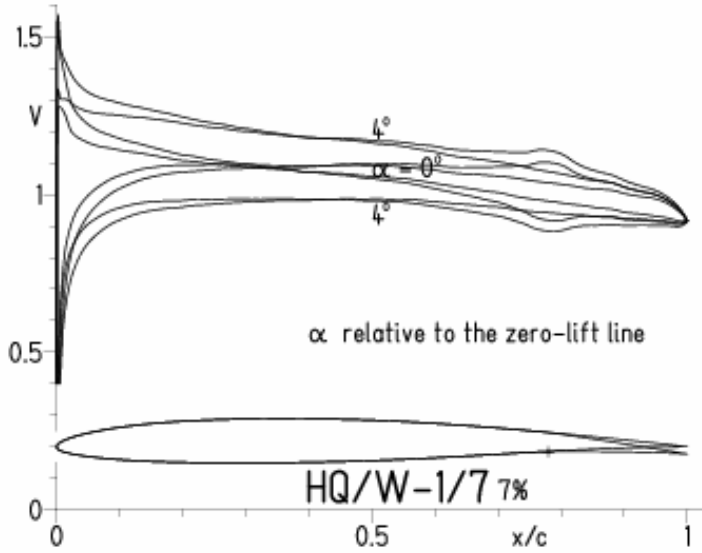
HQ/W-1/7 7%

- Re =  $0.1 \times 10^6$ , Turb. upper 50%  $e^N$ , N=9
- - -  $0.2 \times 10^6$ , Turb. upper 50%  $e^N$ , N=9
- · -  $0.4 \times 10^6$ , Turb. upper 50%  $e^N$ , N=9
- - -  $0.8 \times 10^6$ , Turb. upper 50%  $e^N$ , N=9

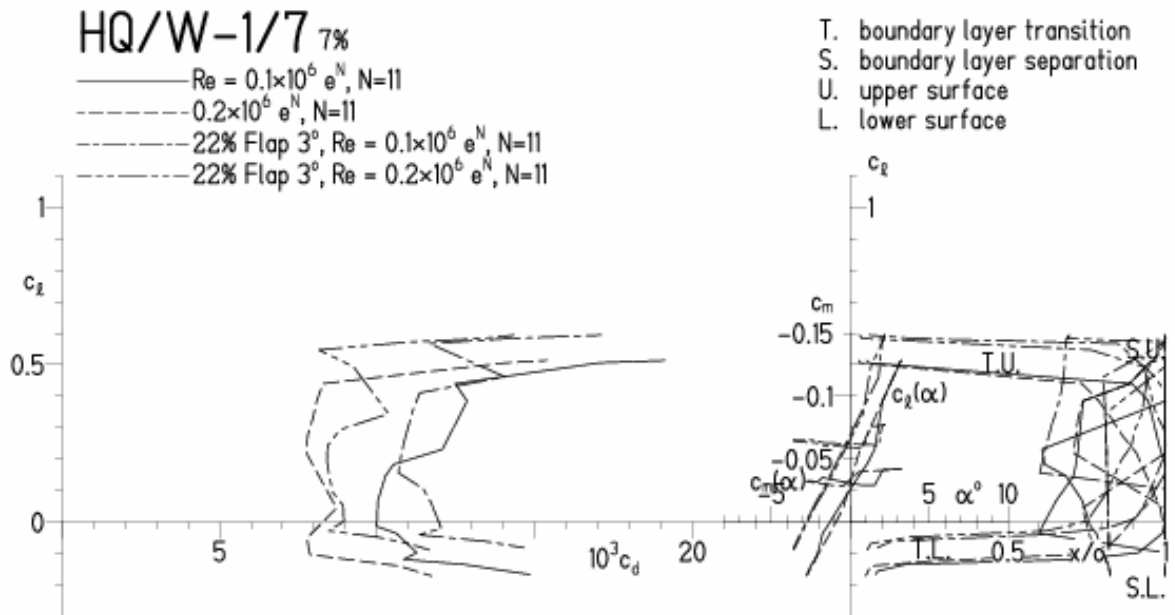


HQ/W-1/7, N=11, mit +3° Wölbklappenausschlag

EPPLER 2005 V. 8.5.07 RUN 5.5.11 18:09

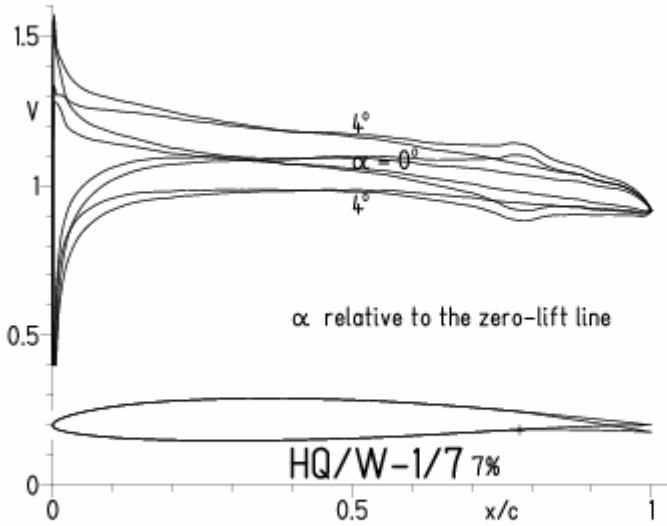


EPPLER 20

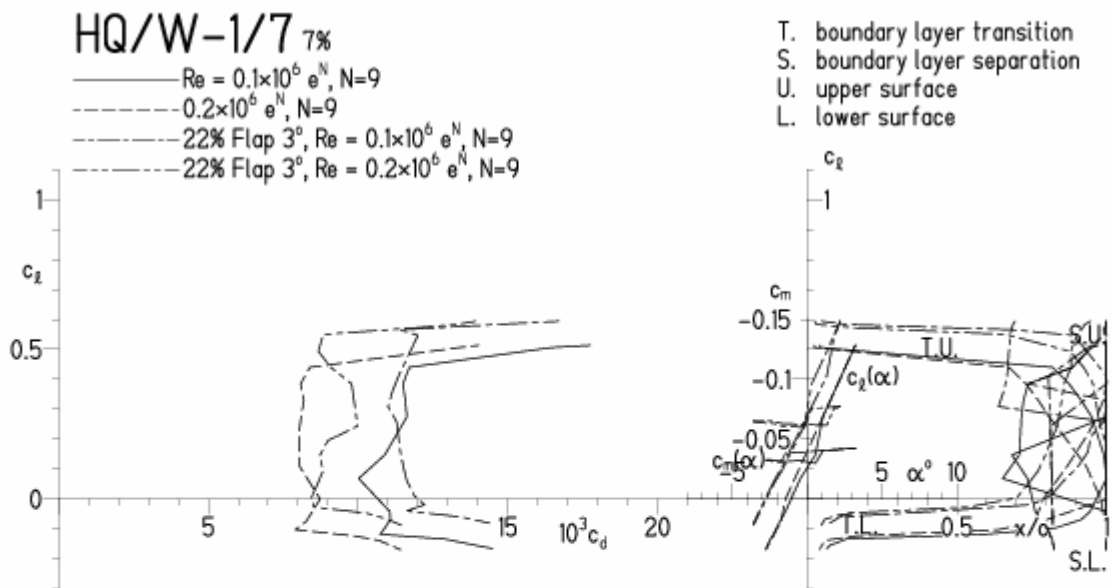


HQ/W-1/7, N=9, mit +3° Wölbklappenausschlag

EPPLER 2005 V. 8.5.07 RUN 5.5.11 18:12

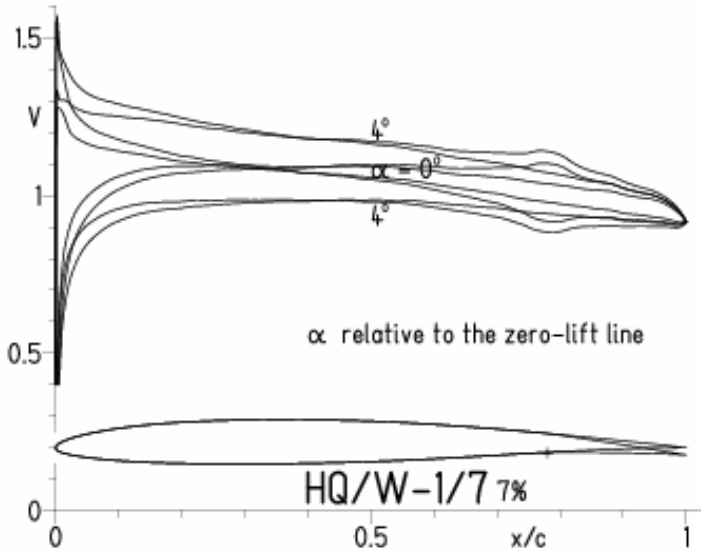


EPPLER 2005 V. 8.5.07 RUN 5.5.11 18:12



HQ/W-1/7, N=9, mit +3° Wölbklappenausschlag, Turbulatoreffekt  
 (Verbesserungen für niedrige Geschwindigkeiten und Profiltiefen an Flügelenden)

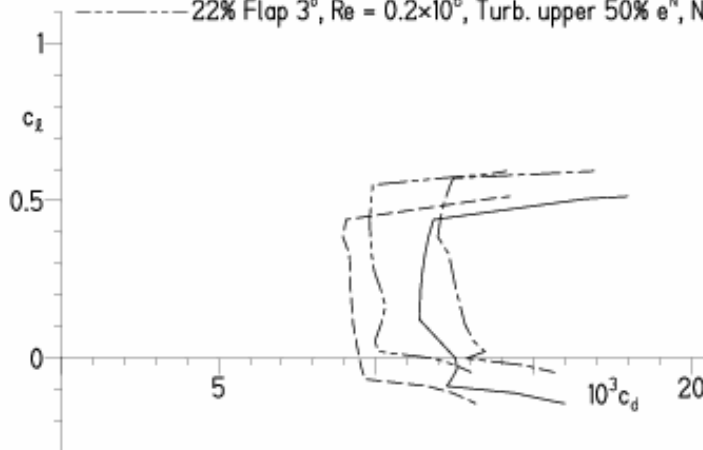
EPPLER 2005 V. 8.5.07 RUN 5.5.11 18:20



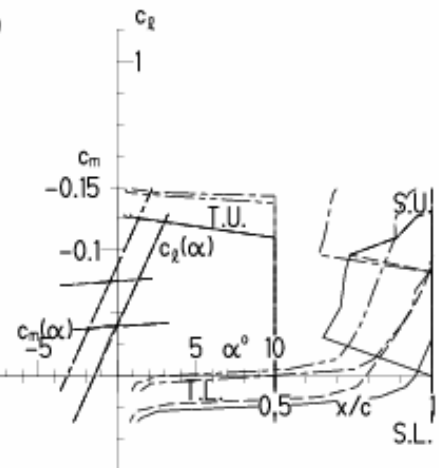
EPPLER 2005 V. 8.5.07 RUN 5.5.11 18:20

HQ/W-1/7 7%

- $Re = 0.1 \times 10^6$ , Turb. upper 50%  $e^N$ ,  $N=9$
- - -  $0.2 \times 10^6$ , Turb. upper 50%  $e^N$ ,  $N=9$
- · - · 22% Flap  $3^\circ$ ,  $Re = 0.1 \times 10^6$ , Turb. upper 50%  $e^N$ ,  $N=9$
- · - · 22% Flap  $3^\circ$ ,  $Re = 0.2 \times 10^6$ , Turb. upper 50%  $e^N$ ,  $N=9$

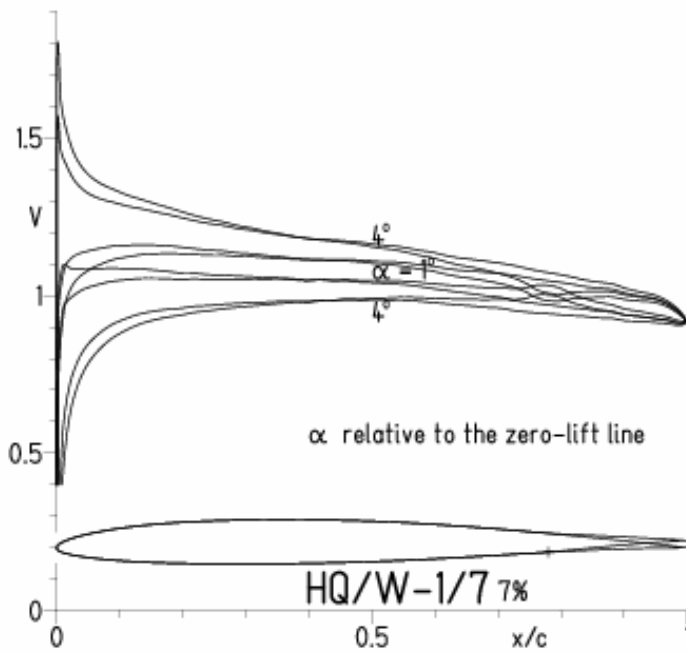


- T. boundary layer transition
- S. boundary layer separation
- U. upper surface
- L. lower surface

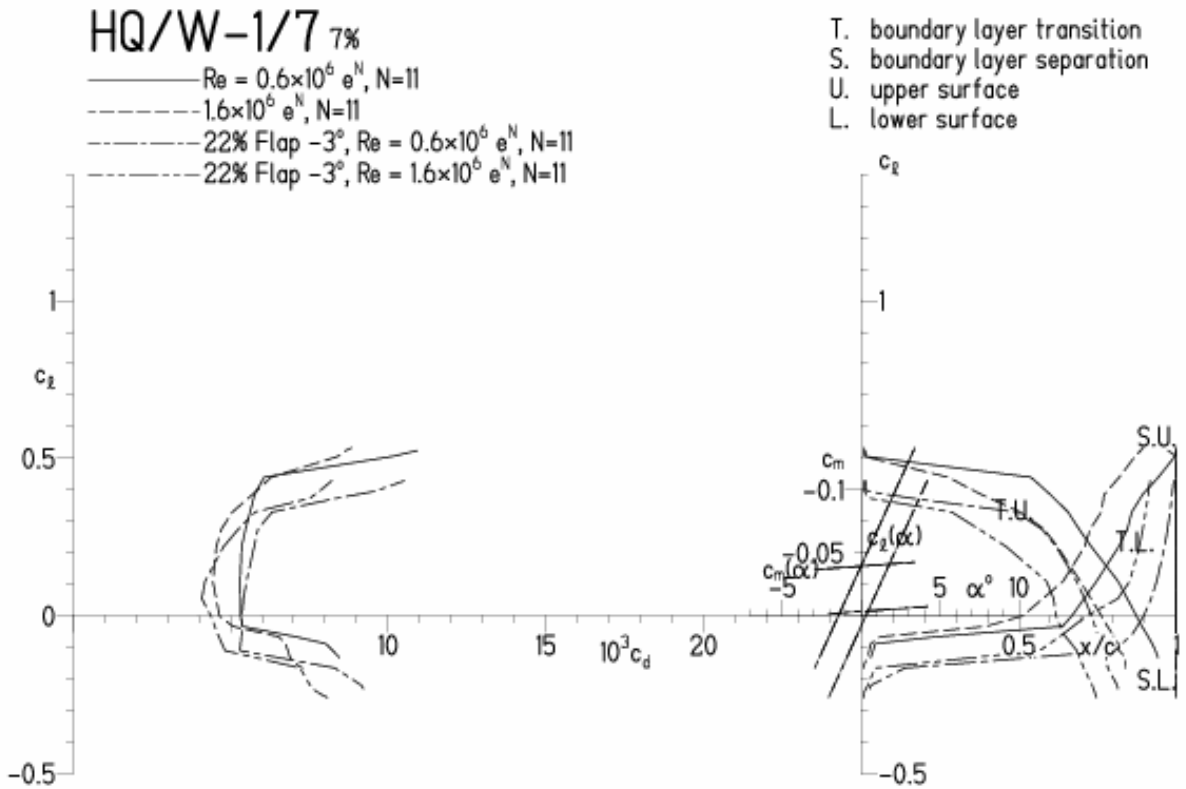


HQ/W-1/7, N=11, mit -3° Wölbklappenausschlag  
 (Segelmodelle haben damit das Potential für sehr hohe Endgeschwindigkeiten)

EPPLER 2005 V. 8.5.07 RUN 18.5.11 12:08

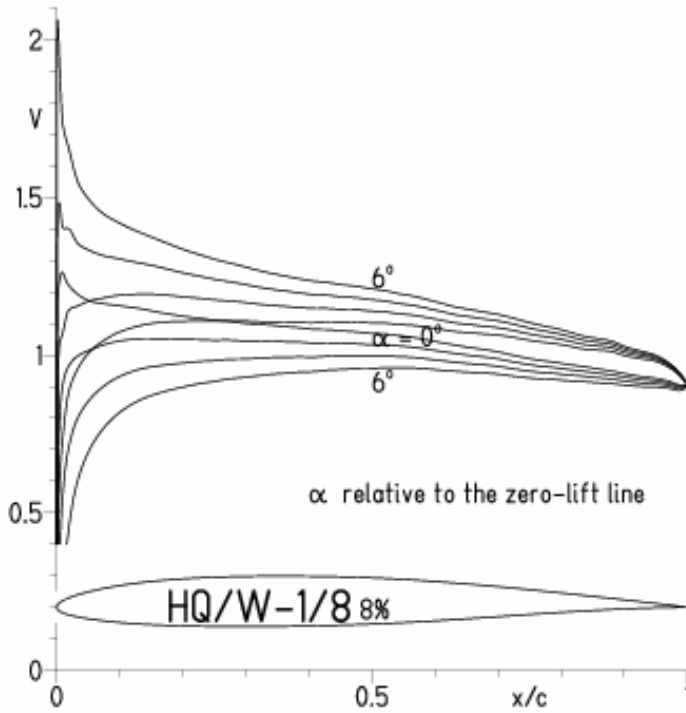


EPPLER 2005 V. 8.5.07 RUN 18.5.11 12:08



HQ/W-1/8, N=11

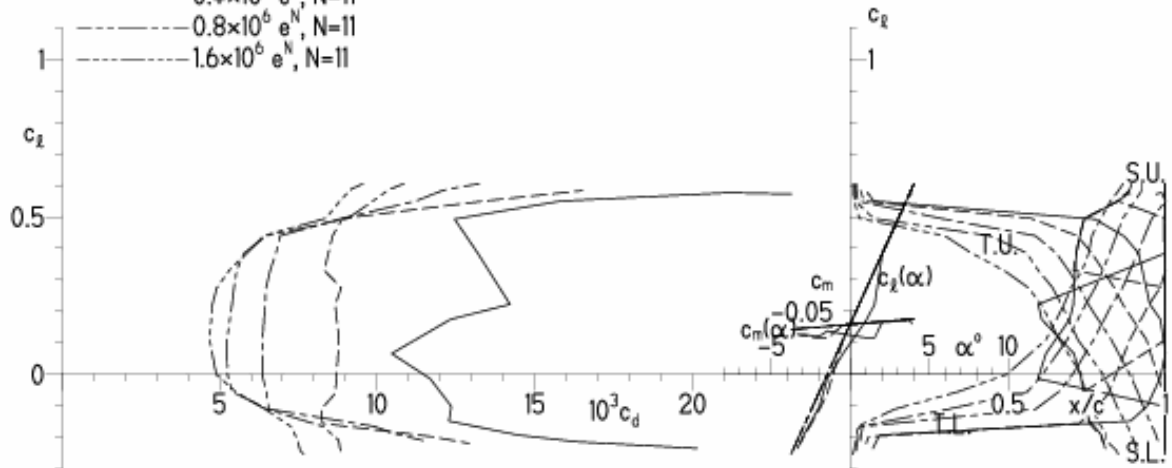
EPPLER 2005 V. 8.5.07 RUN 19.5.11 13:11



EPPLER 2005 V. 8.5.07 RUN 19.5.11 13:11

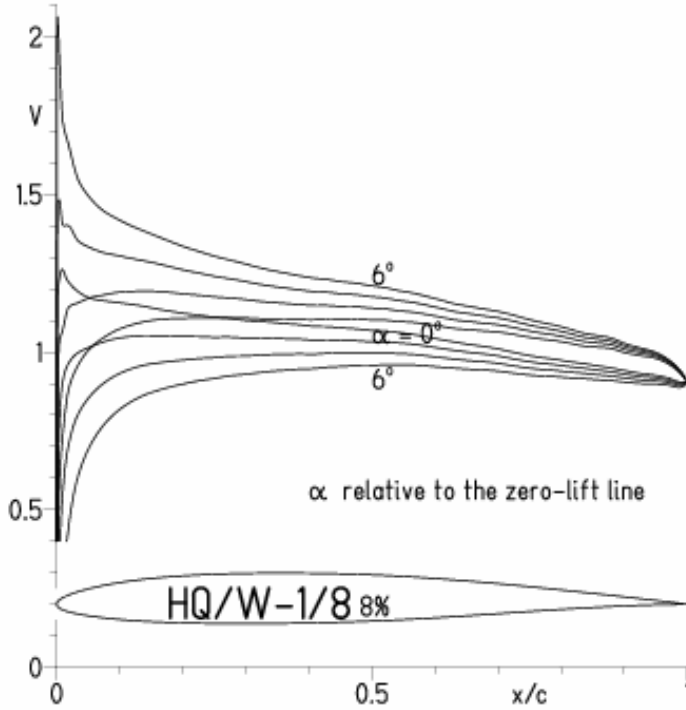
HQ/W-1/8 8%

- $Re = 0.1 \times 10^6 e^N, N=11$
- - -  $0.2 \times 10^6 e^N, N=11$
- · -  $0.4 \times 10^6 e^N, N=11$
- · - ·  $0.8 \times 10^6 e^N, N=11$
- · - · -  $1.6 \times 10^6 e^N, N=11$

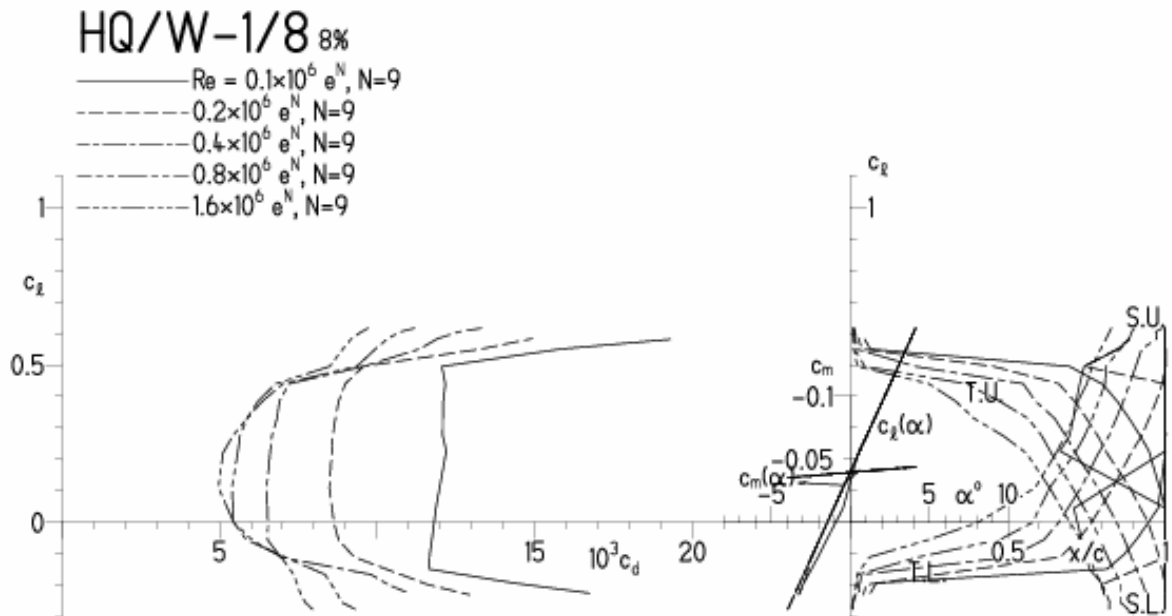


HQ/W-1/8, N=9

EPPLER 2005 V. 8.5.07 RUN 19.5.11 15:33

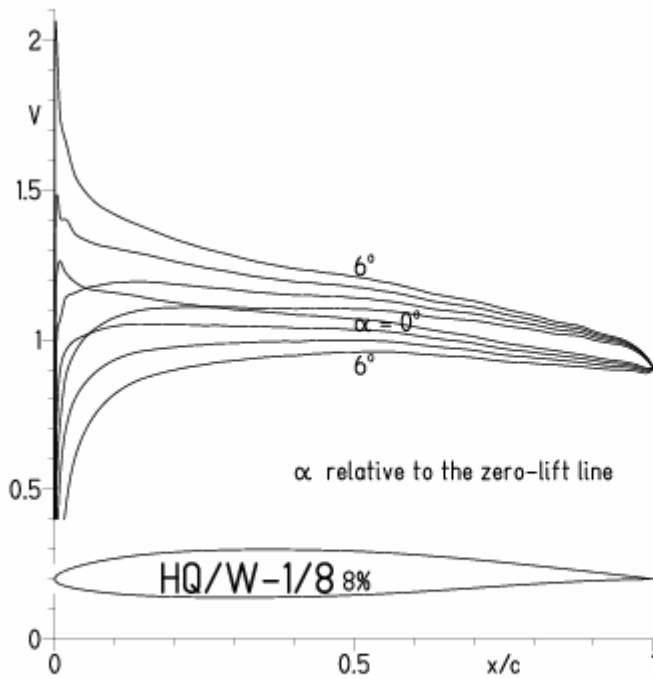


EPPLER 2005 V. 8.5.07 RUN 19.5.11 15:33



HQ/W-1/8, N=9, Turbulatoreffekt (optimal beim Maximum der Wölbung)

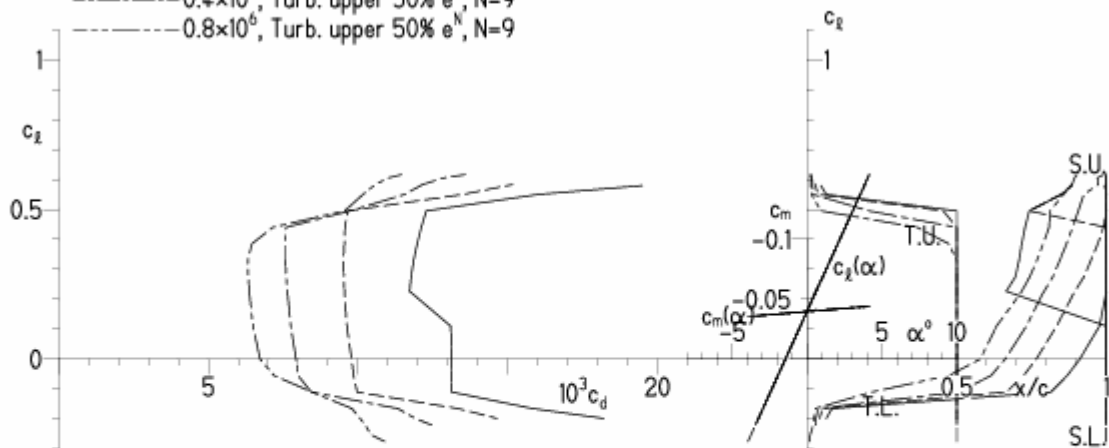
EPPLER 2005 V. 8.5.07 RUN 19.5.11 15:42



EPPLER 2005 V. 8.5.07 RUN 19.5.11 15:42

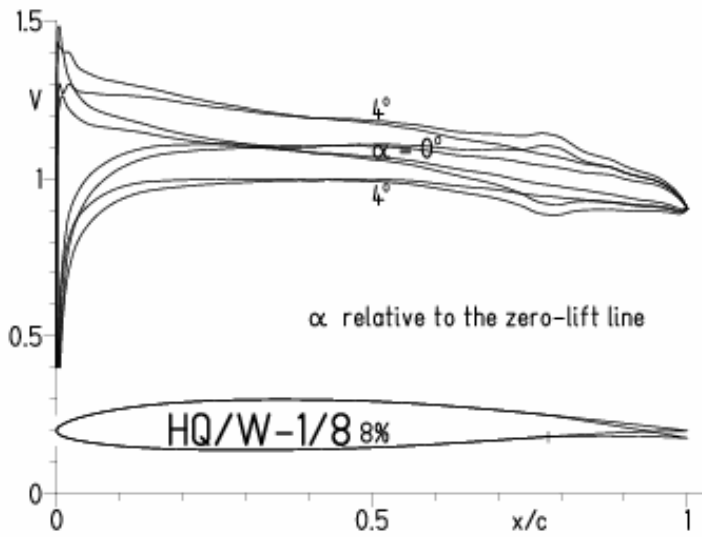
**HQ/W-1/8 8%**

- $Re = 0.1 \times 10^6$ , Turb. upper 50%  $e^N$ , N=9
- - -  $0.2 \times 10^6$ , Turb. upper 50%  $e^N$ , N=9
- · -  $0.4 \times 10^6$ , Turb. upper 50%  $e^N$ , N=9
- - -  $0.8 \times 10^6$ , Turb. upper 50%  $e^N$ , N=9

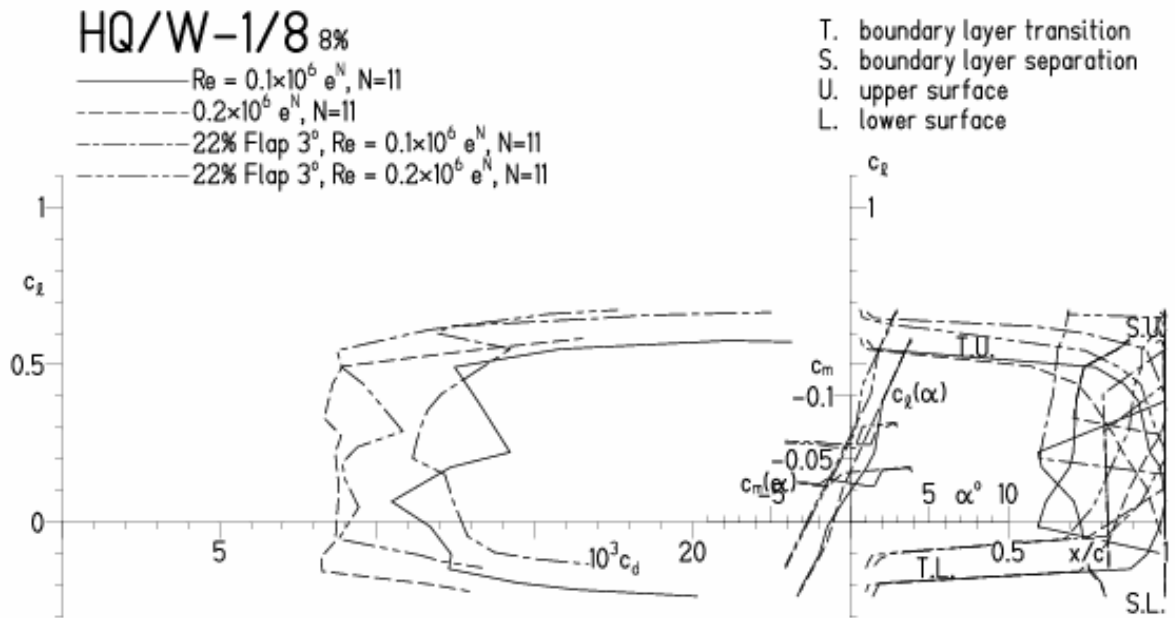


HQ/W-1,5/8, N=11, mit +3° Wölbklappenausschlag

EPPLER 2005 V. 8.5.07 RUN 19.5.11 16:18

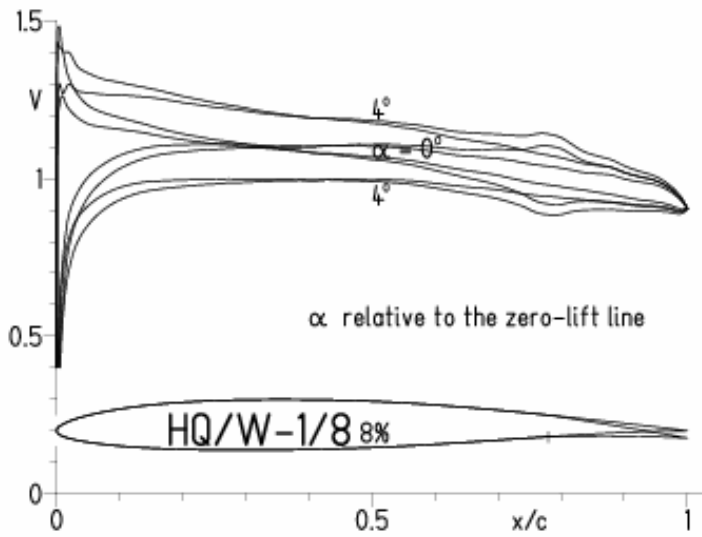


EPPLER 2005 V. 8.5.07 RUN 19.5.11 16:18

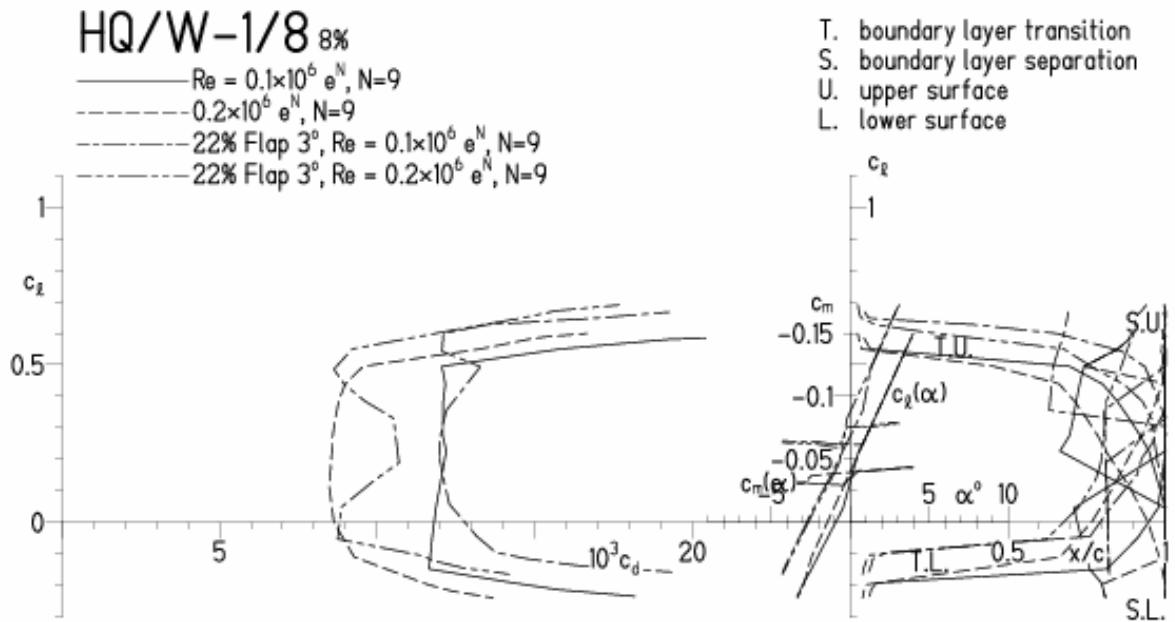


HQ/W-1,5/8, N=9, mit +3° Wölbklappenausschlag

EPPLER 2005 V. 8.5.07 RUN 19.5.11 16:33

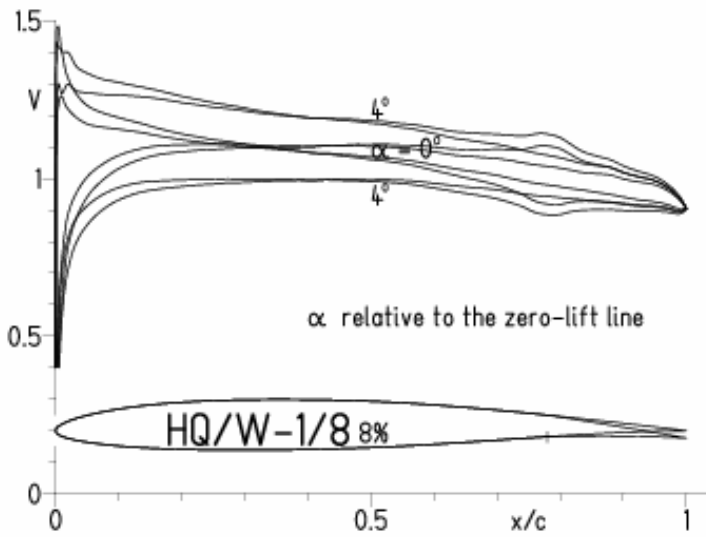


EPPLER 2005 V. 8.5.07 RUN 19.5.11 16:33

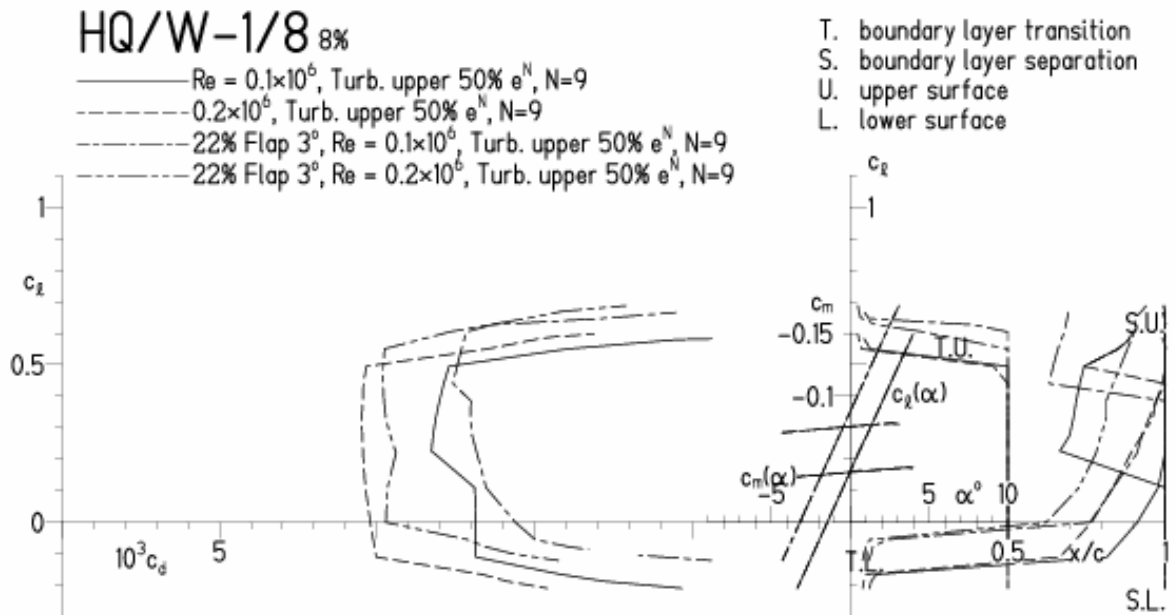


**HQ/W-1/8, N=9, mit +3° Wölbklappenausschlag, Turbulatoreffekt**  
 (Verbesserungen für niedrige Geschwindigkeiten und Profiltiefen an Flügelenden)

EPPLER 2005 V. 8.5.07 RUN 19.5.11 16:36

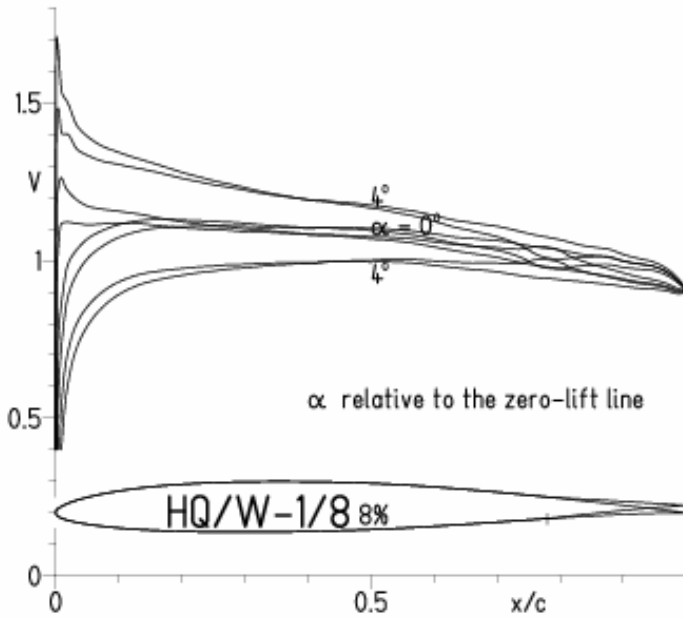


EPPLER 2005 V. 8.5.07 RUN 19.5.11 16:36

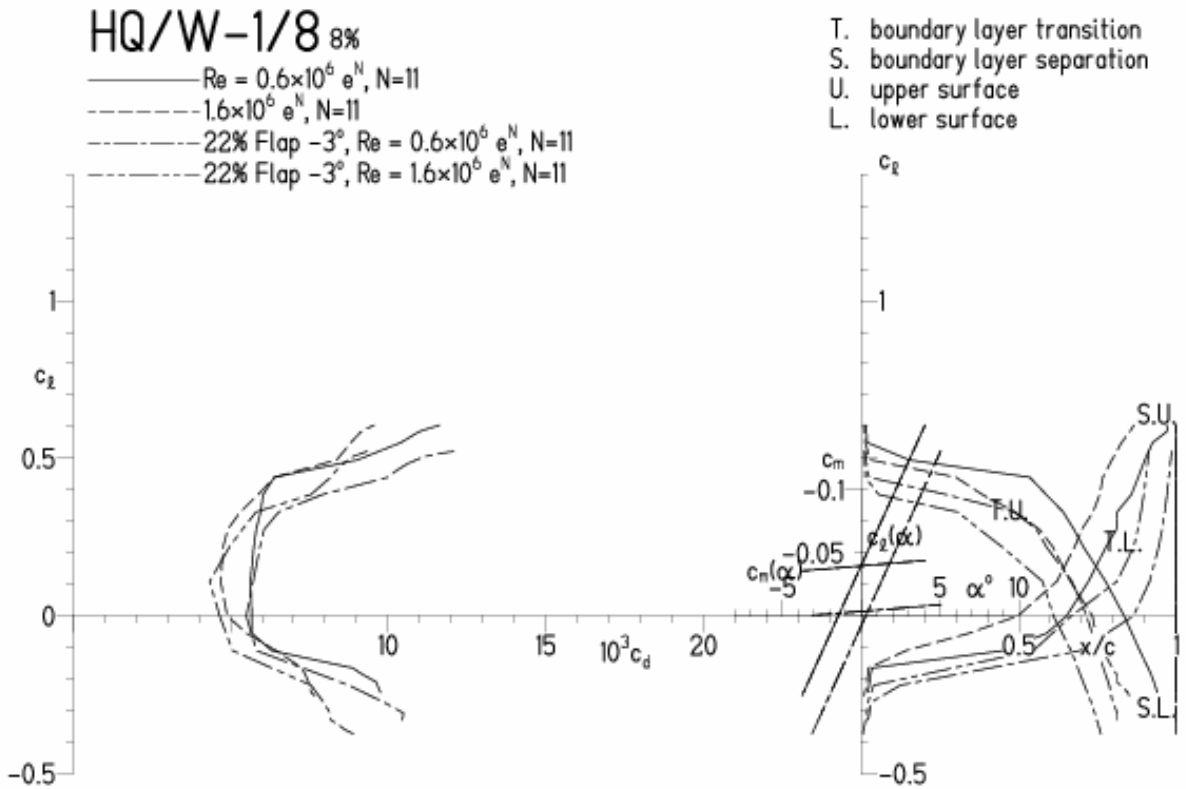


HQ/W-1/8, N=11, mit -3° Wölbklappenausschlag  
 (Segelmodelle haben damit das Potential für sehr hohe Endgeschwindigkeiten)

EPPLER 2005 V. 8.5.07 RUN 19.5.11 19:21

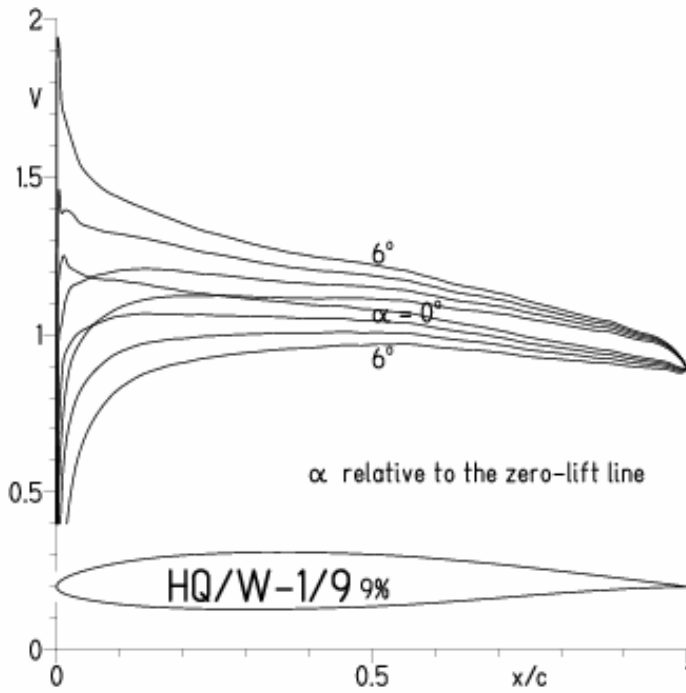


EPPLER 2005 V. 8.5.07 RUN 19.5.11 19:21

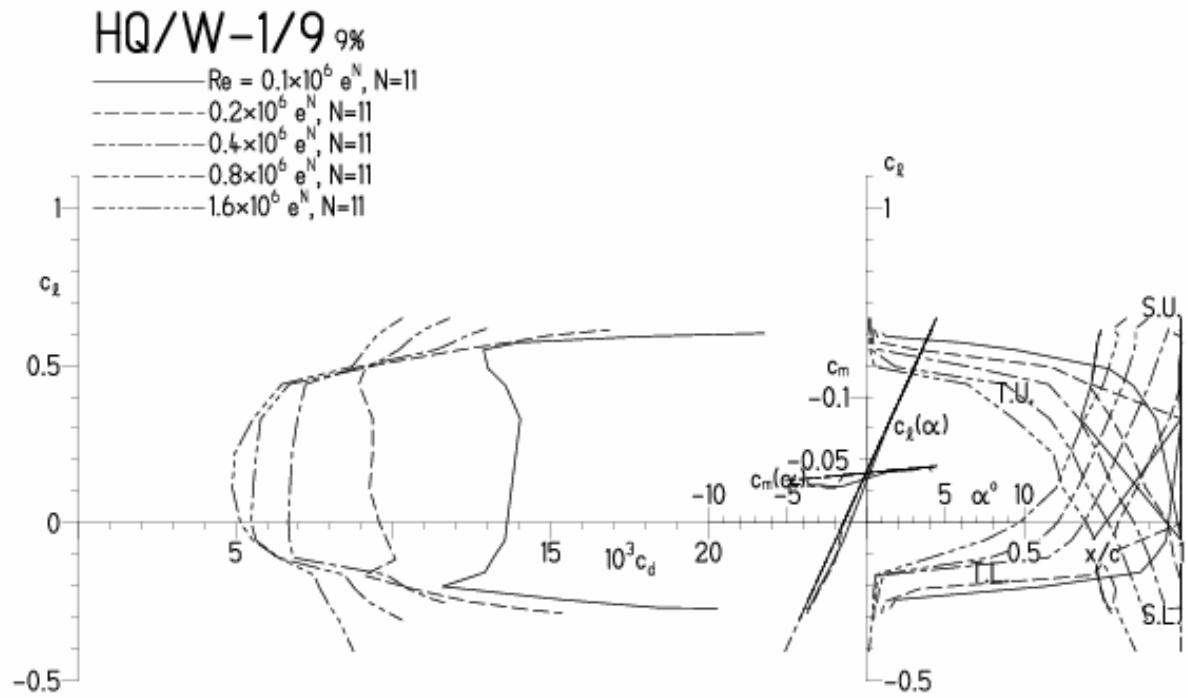


HQ/W-1/9, N=11

EPPLER 2005 V. 8.5.07 RUN 215.11 11:26

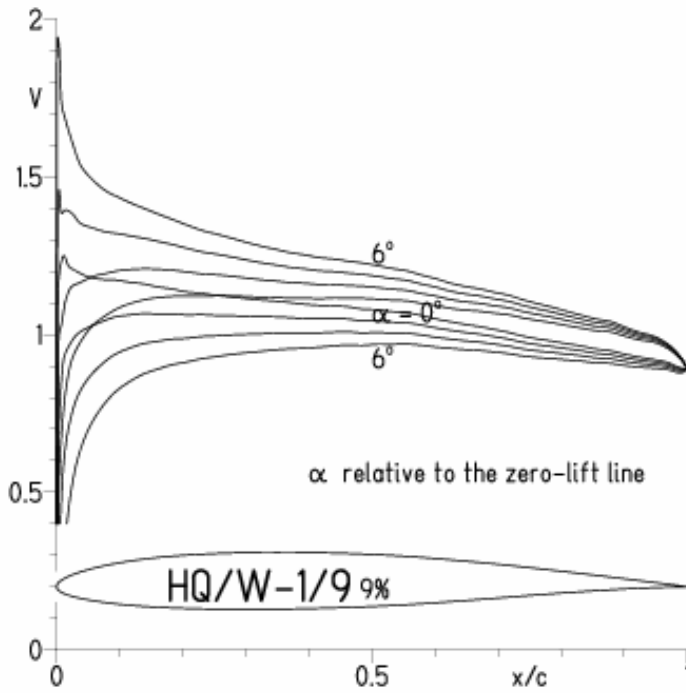


EPPLER 2005 V. 8.5.07 RUN 215.11 11:26

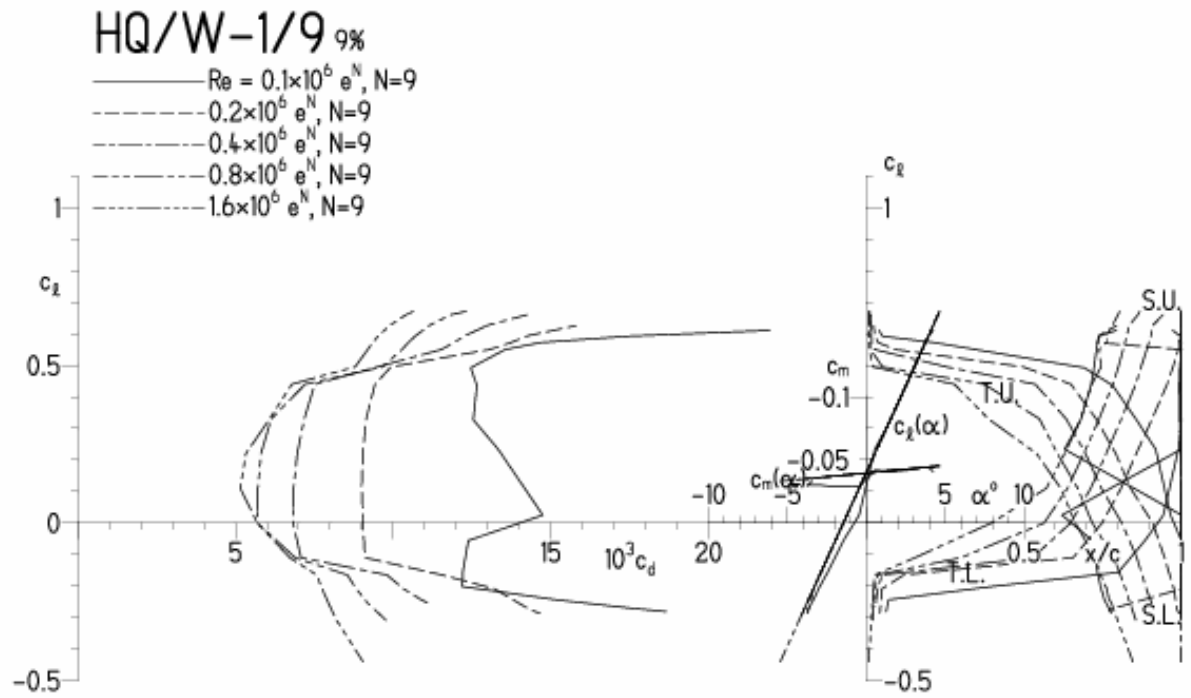


HQ/W-1/9, N=9

EPPLER 2005 V. 8.5.07 RUN 215.11 11:59

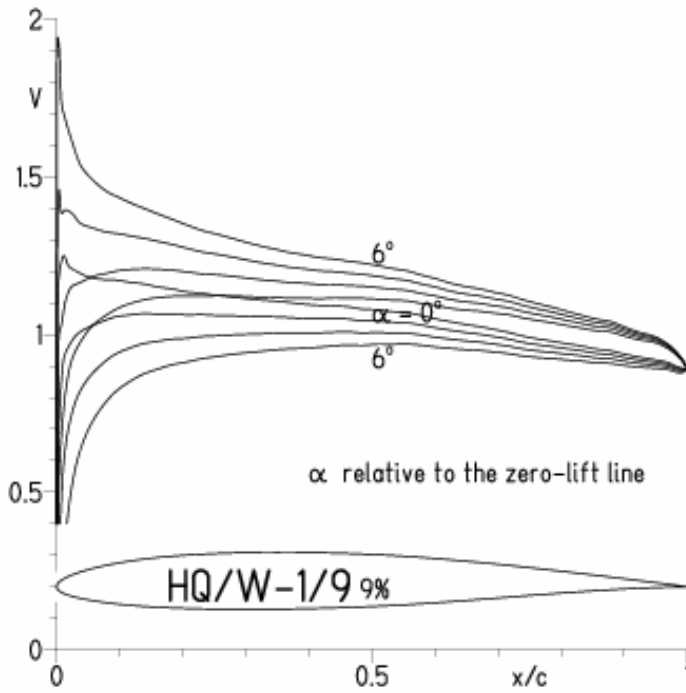


EPPLER 2005 V. 8.5.07 RUN 215.11 11:59



HQ/W-1/9, N=9, Turbulatoreffekt (optimal beim Maximum der Wölbung)

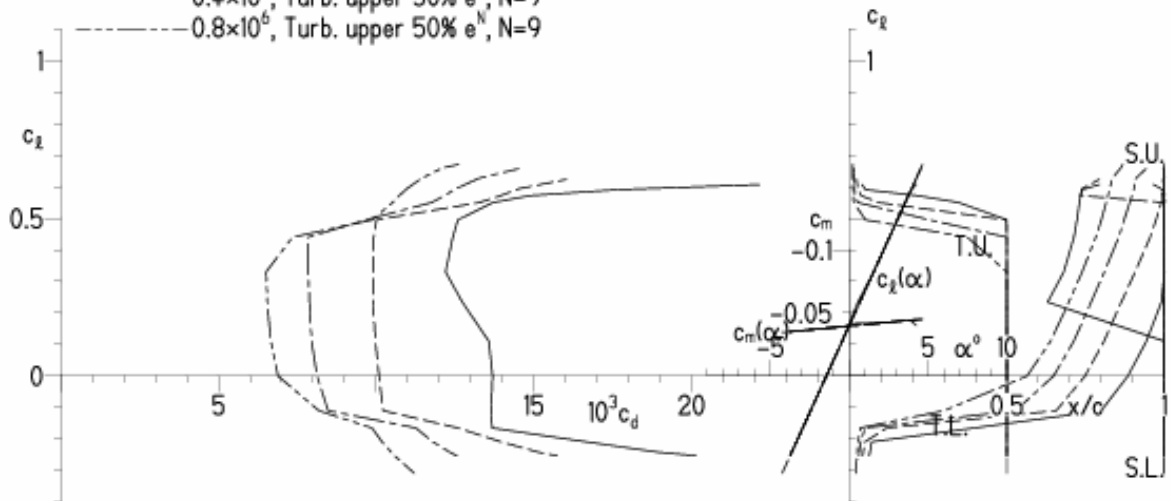
EPPLER 2005 V. 8.5.07 RUN 21.5.11 12:18



EPPLER 2005 V. 8.5.07 RUN 21.5.11 12:18

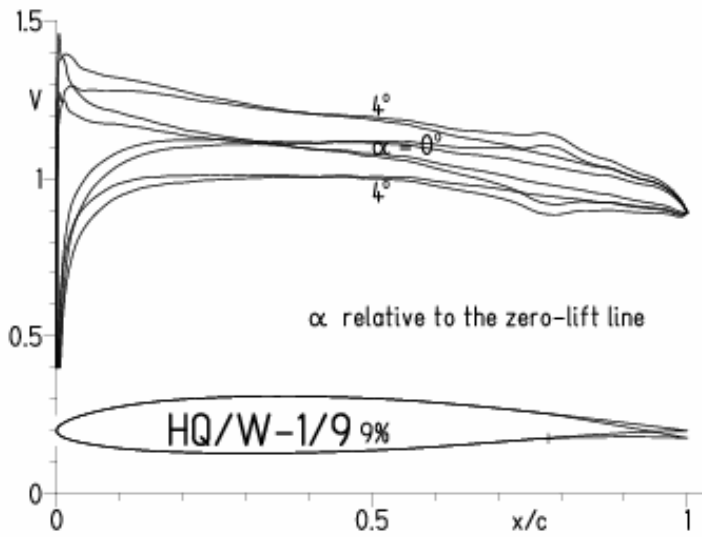
HQ/W-1/9 9%

- $Re = 0.1 \times 10^6$ , Turb. upper 50%  $e^N$ ,  $N=9$
- - -  $0.2 \times 10^6$ , Turb. upper 50%  $e^N$ ,  $N=9$
- · -  $0.4 \times 10^6$ , Turb. upper 50%  $e^N$ ,  $N=9$
- - -  $0.8 \times 10^6$ , Turb. upper 50%  $e^N$ ,  $N=9$

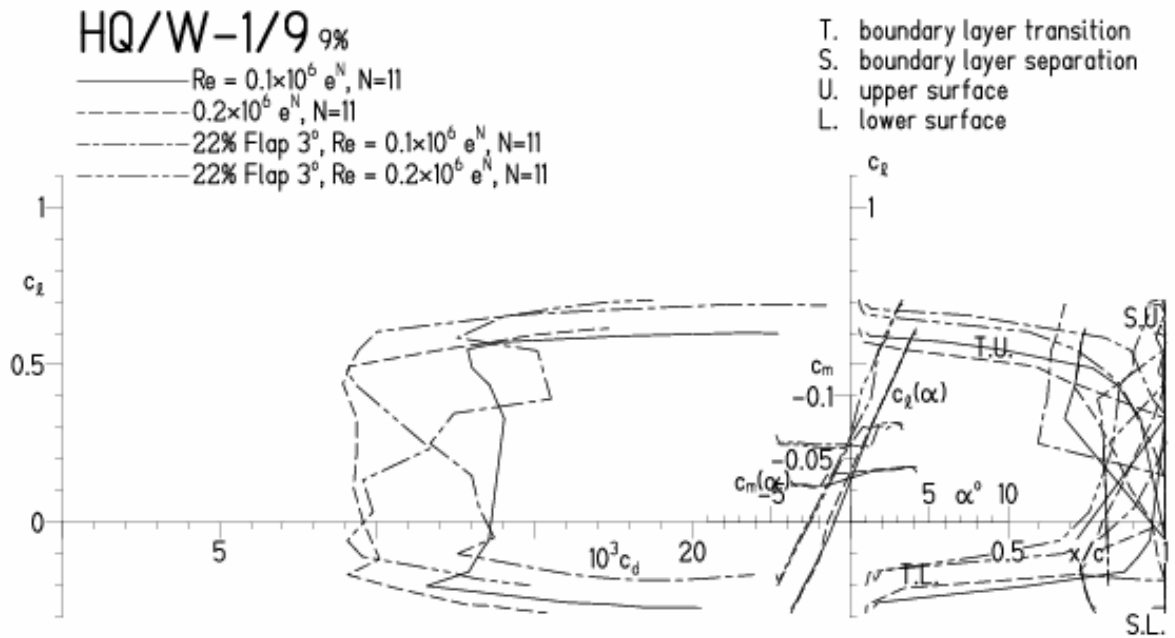


HQ/W-1/9, N=11, mit +3° Wölbklappenausschlag

EPPLER 2005 V. 8.5.07 RUN 27.5.11 12:49

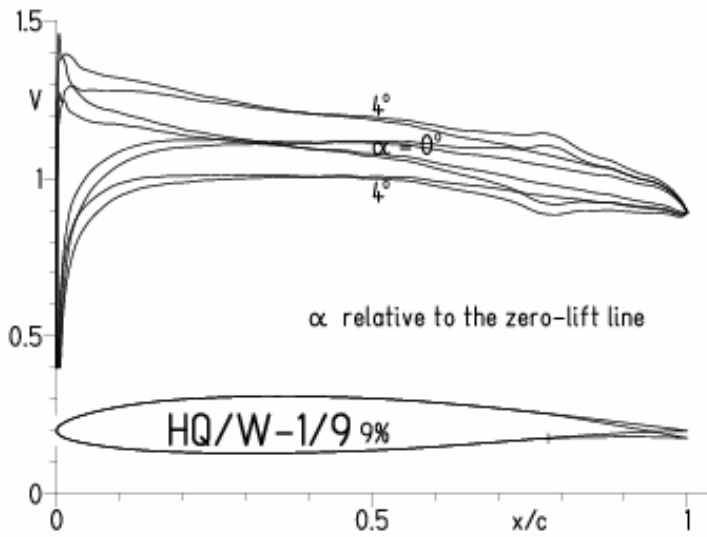


EPPLER 2005 V. 8.5.07 RUN 27.5.11 12:49

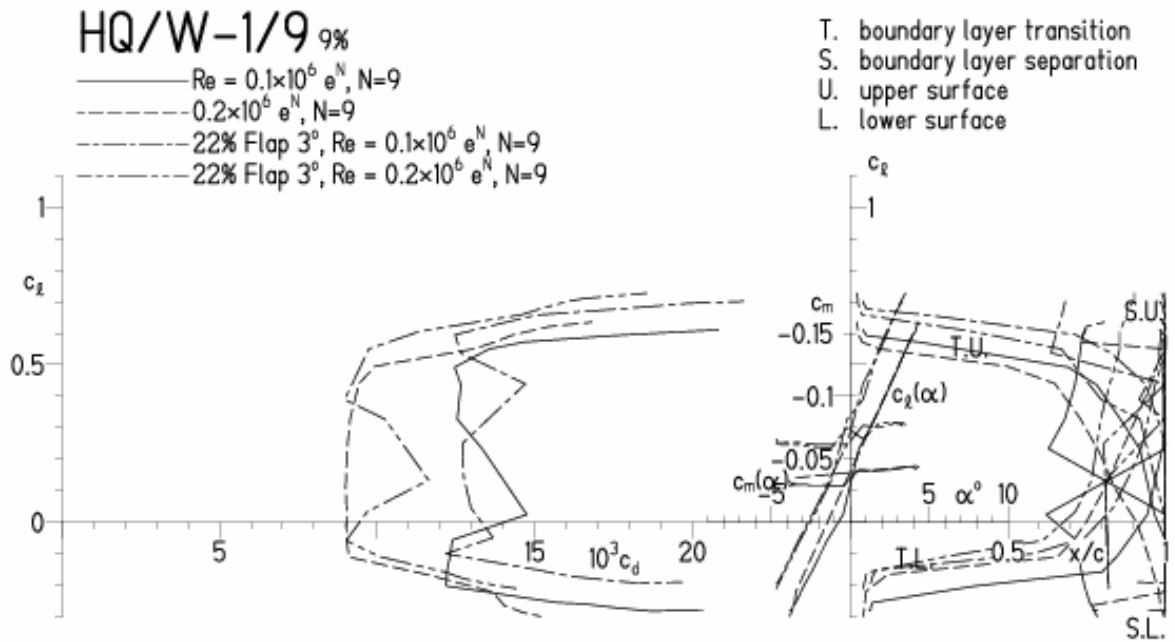


HQ/W-1/9, N=9, mit +3° Wölbklappenausschlag

EPPLER 2005 V. 8.5.07 RUN 27.5.11 13:04

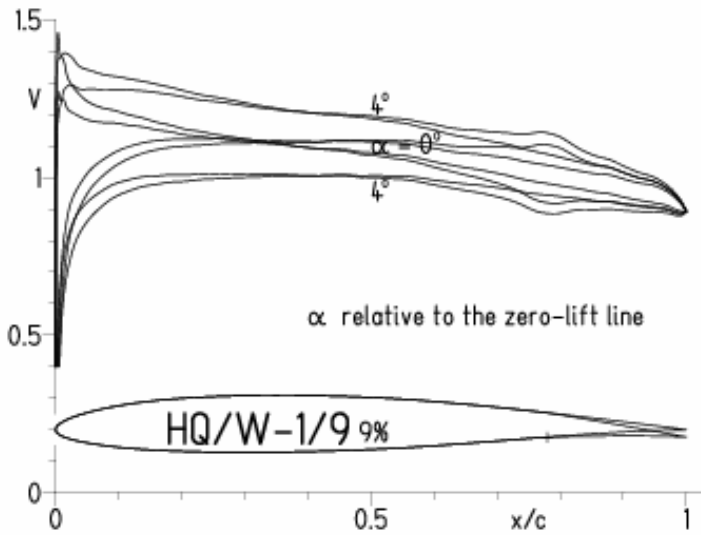


EPPLER 2005 V. 8.5.07 RUN 27.5.11 13:04



HQ/W-1/9, N=9, mit +3° Wölbklappenausschlag, Turbulatoreffekt  
 (Verbesserungen für niedrige Geschwindigkeiten und Profiltiefen an Flügelenden)

EPPLER 2005 V. 8.5.07 RUN 27.5.11 13:07

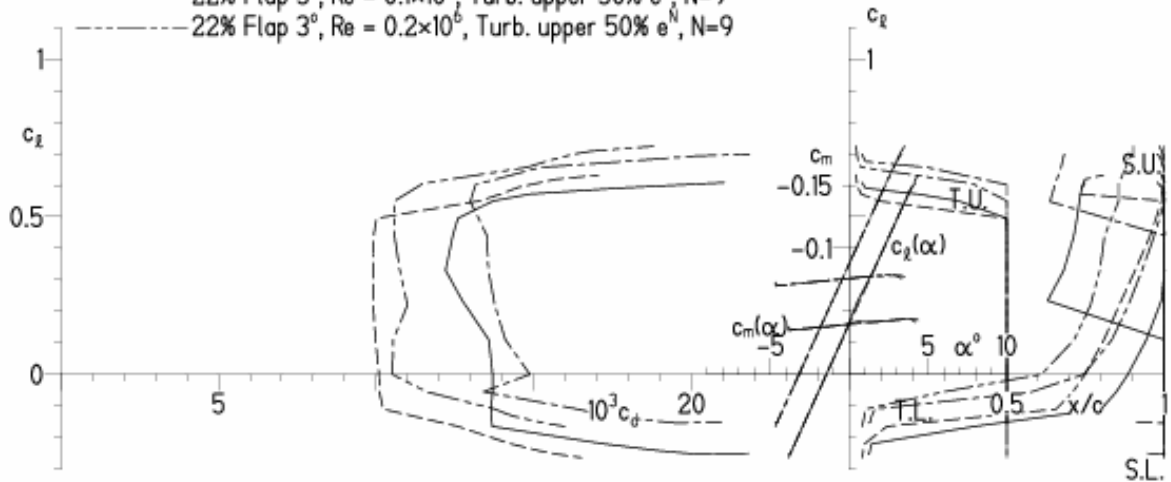


EPPLER 2005 V. 8.5.07 RUN 27.5

HQ/W-1/9 9%

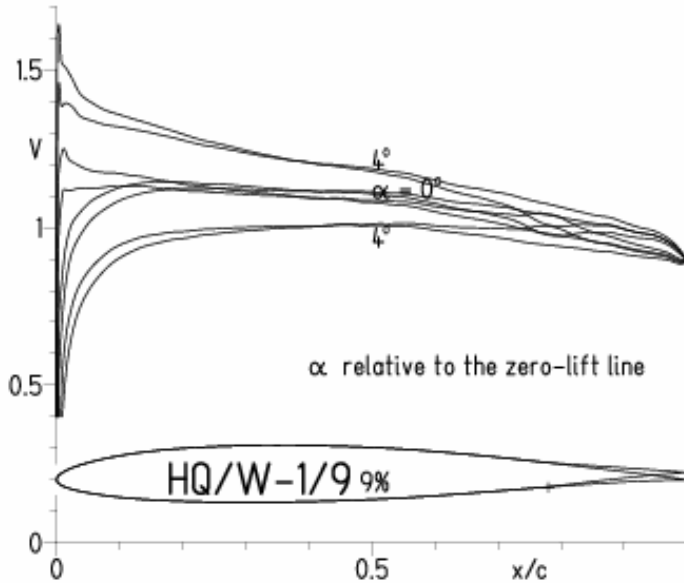
- $Re = 0.1 \times 10^6$ , Turb. upper 50%  $e^N$ , N=9
- - -  $0.2 \times 10^6$ , Turb. upper 50%  $e^N$ , N=9
- · - 22% Flap 3°,  $Re = 0.1 \times 10^6$ , Turb. upper 50%  $e^N$ , N=9
- · - 22% Flap 3°,  $Re = 0.2 \times 10^6$ , Turb. upper 50%  $e^N$ , N=9

- T. boundary layer transition
- S. boundary layer separation
- U. upper surface
- L. lower surface

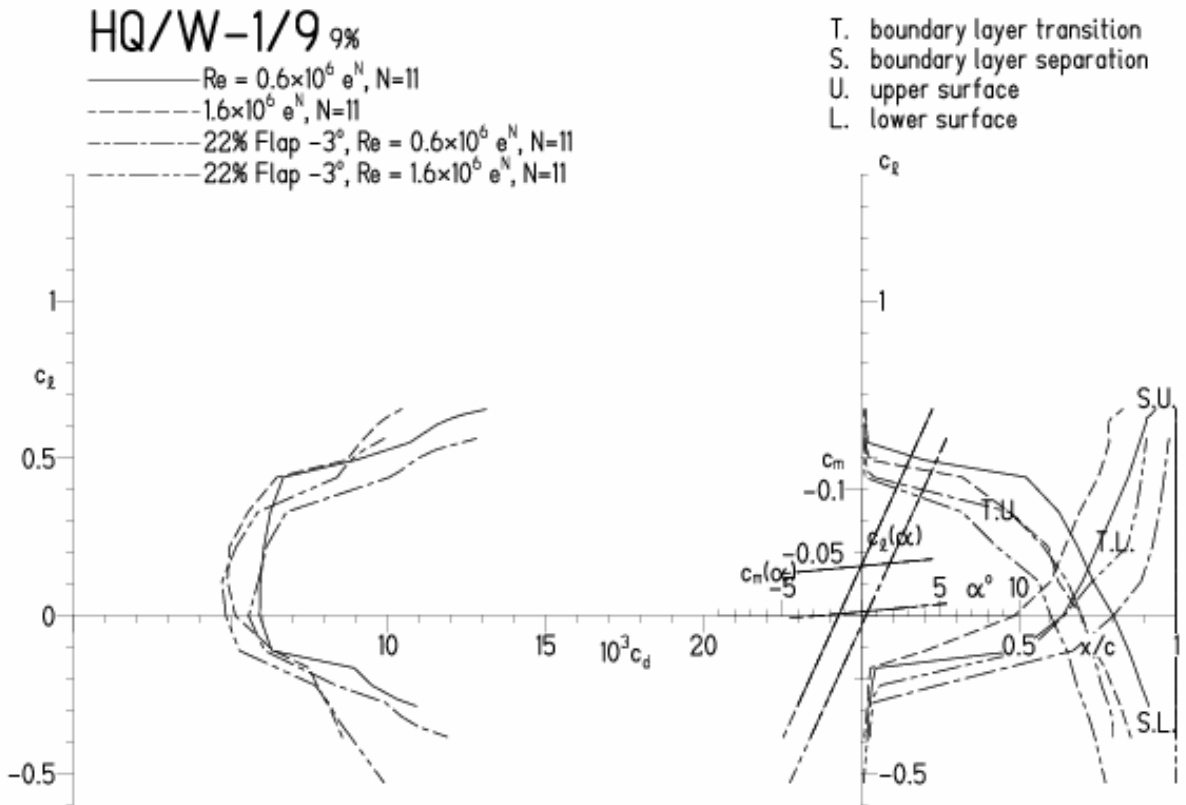


HQ/W-1/9, N=11, mit -3° Wölbklappenausschlag  
 (Segelmodelle haben damit das Potential für sehr hohe Endgeschwindigkeiten)

EPPLER 2005 V. 8.5.07 RUN 27.5.11 17:07

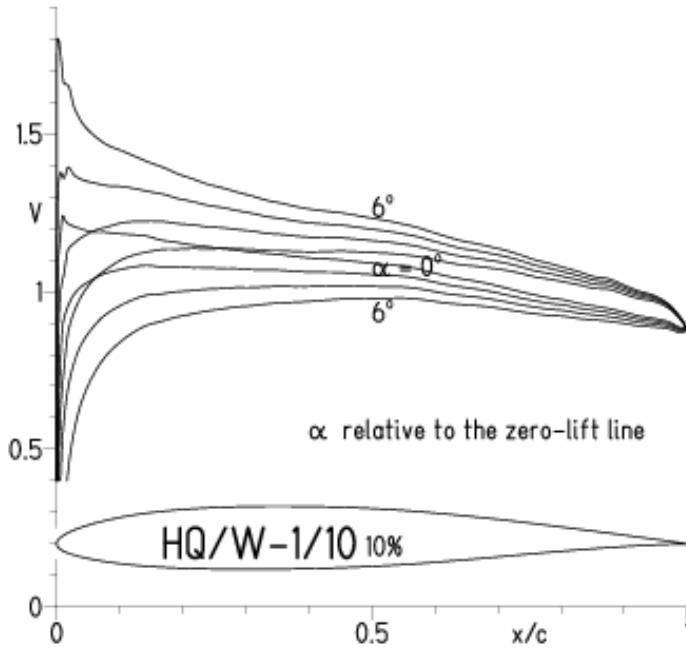


EPPLER 2005 V. 8.5.07 RUN 27.5.11 17:07

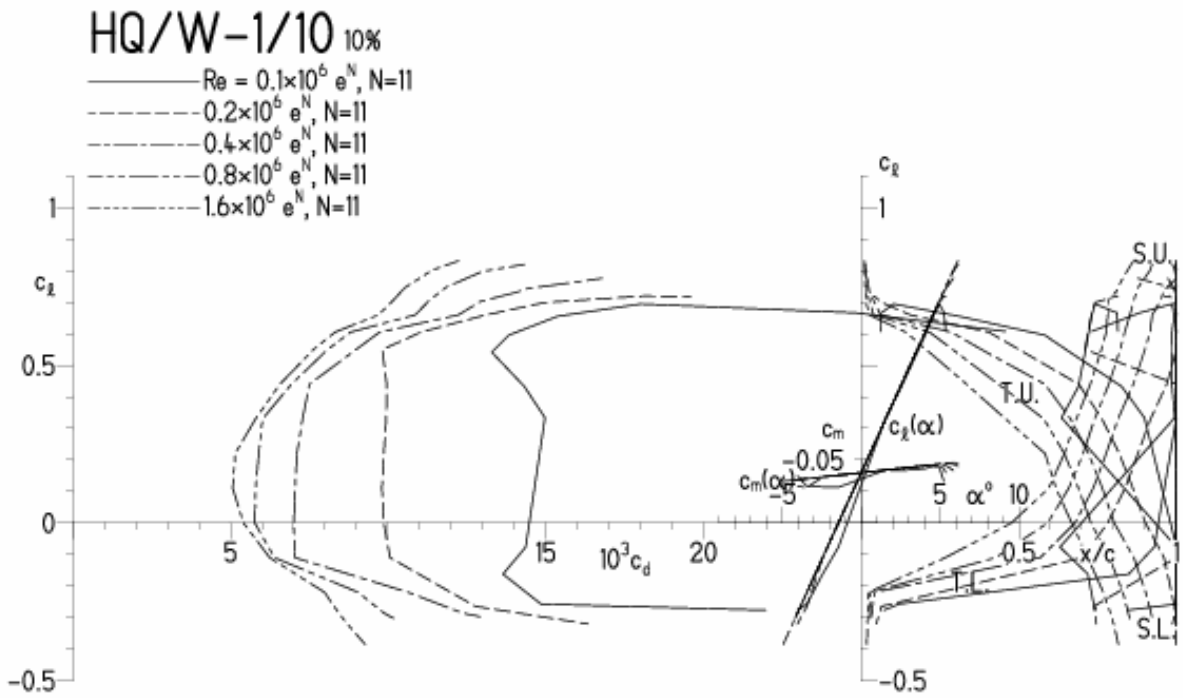


HQ/W-1/10, N=11

EPPLER 2005 V. 8.5.07 RUN 27.5.11 18:11

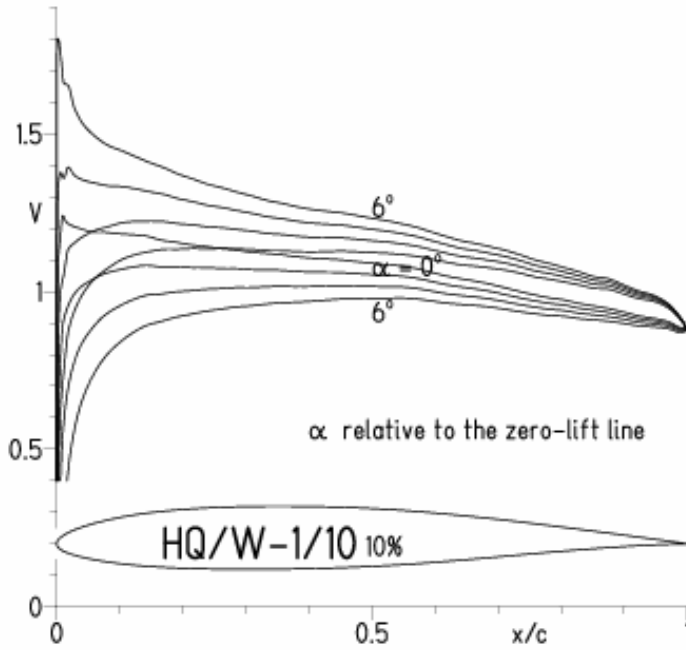


EPPLER 2005 V. 8.5.07 RUN 27.5.11 18:11

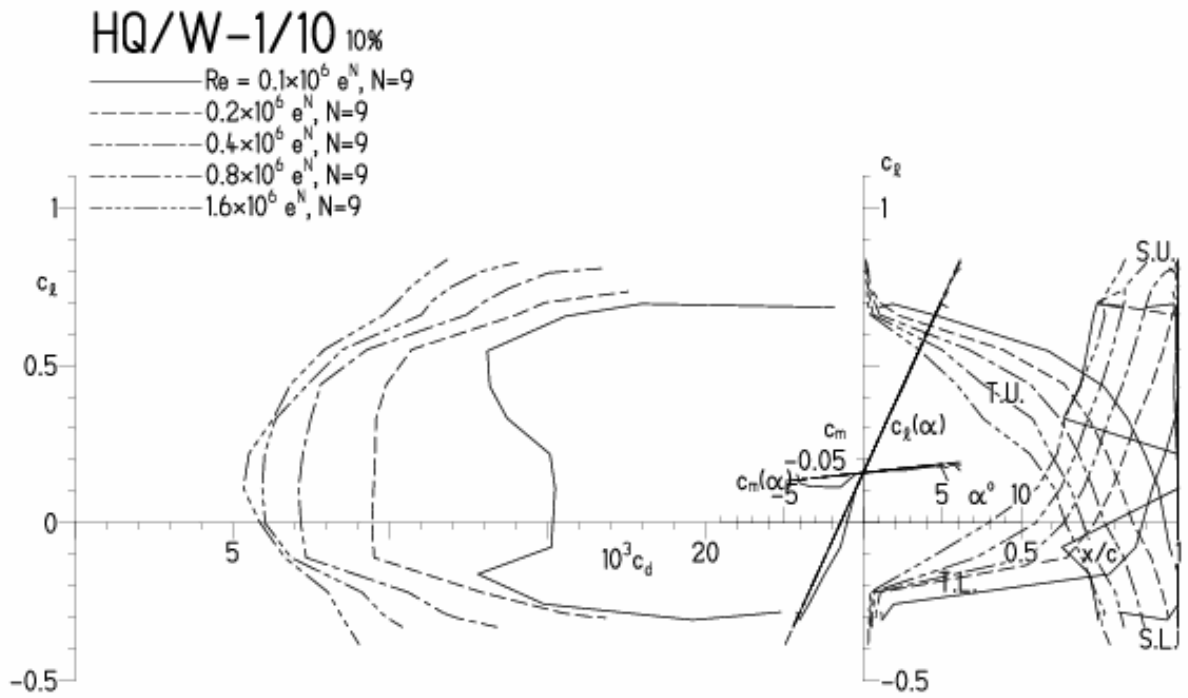


HQ/W-1/10, N=9

EPPLER 2005 V. 8.5.07 RUN 27.5.11 18:36

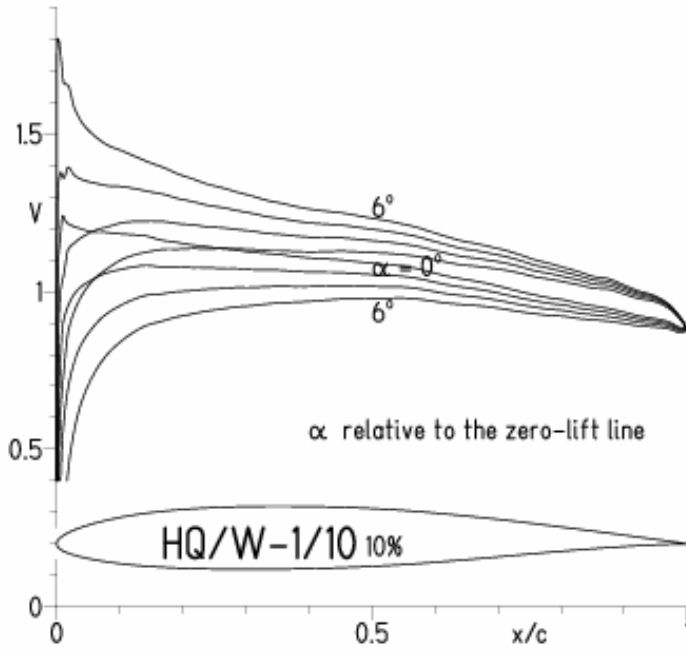


EPPLER 2005 V. 8.5.07 RUN 27.5.11 18:36

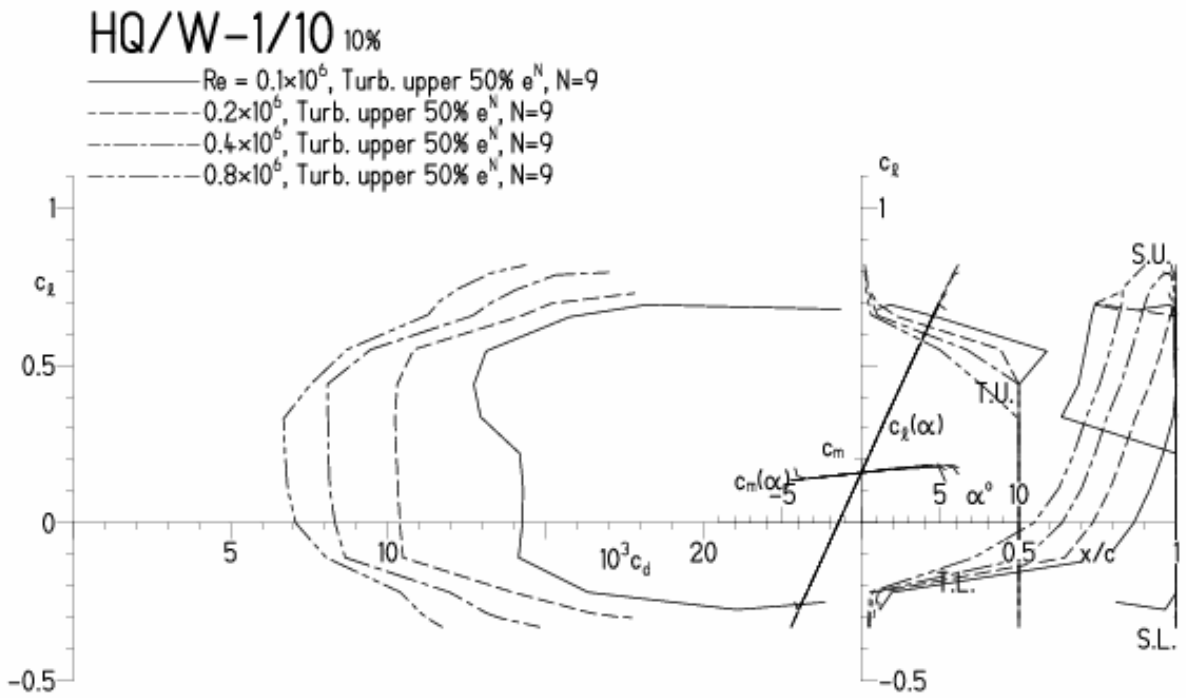


HQ/W-1/10, N=9, Turbulatoreffekt (optimal beim Maximum der Wölbung)

EPPLER 2005 V. 8.5.07 RUN 27.5.11 18:39

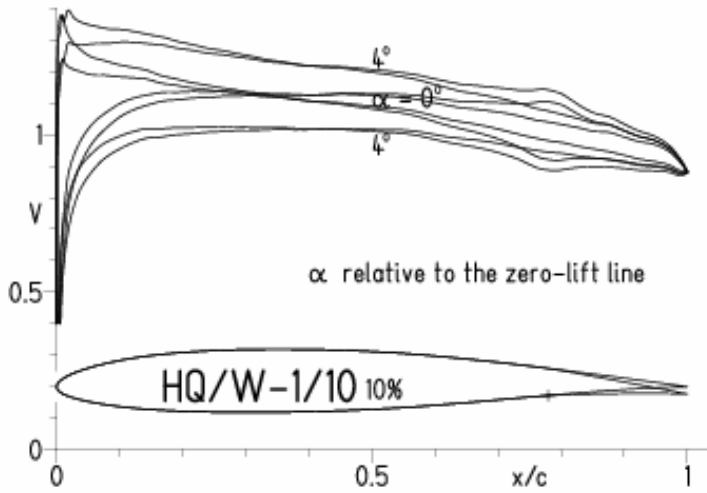


EPPLER 2005 V. 8.5.07 RUN 27.5.11 18:39

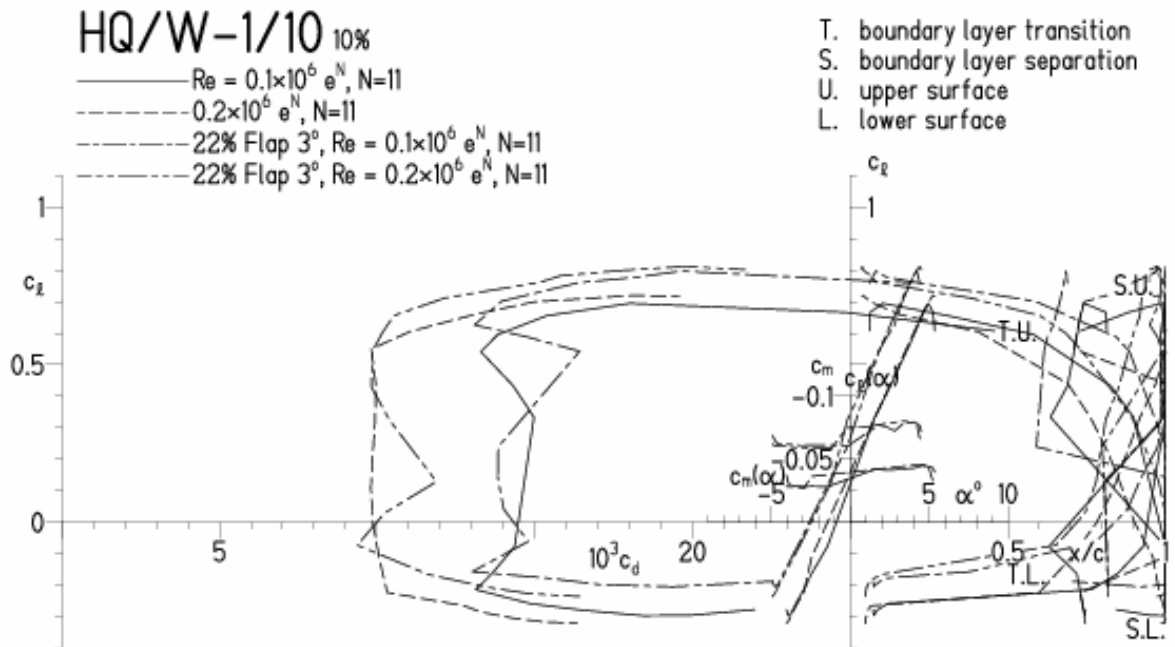


HQ/W-1/10, N=11, mit +3° Wölbklappenausschlag

EPPLER 2005 V. 8.5.07 RUN 28.5.11 17:05



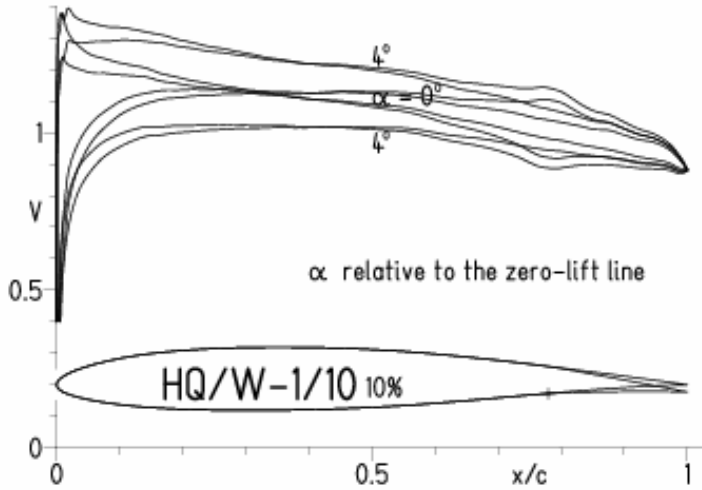
EPPLER 2005 V. 8



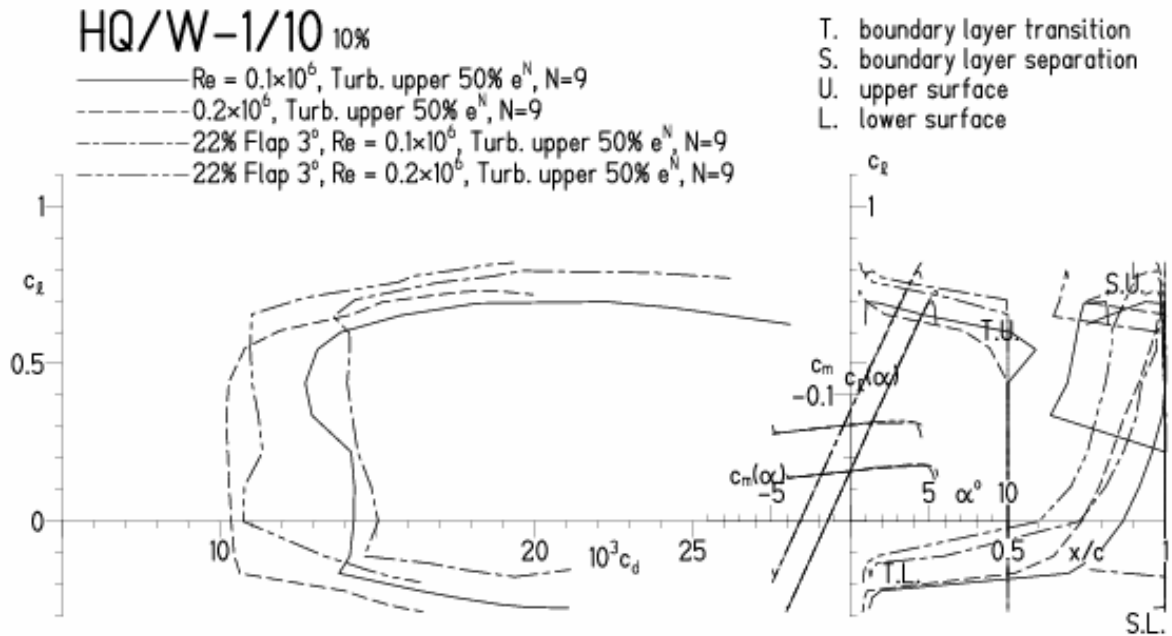


HQ/W-1/10, N=9, mit +3° Wölbklappenausschlag, Turbulatoreffekt  
 (Verbesserungen für niedrige Geschwindigkeiten und Profiltiefen an Flügelenden)

EPPLER 2005 V. 8.5.07 RUN 315.11 11:18

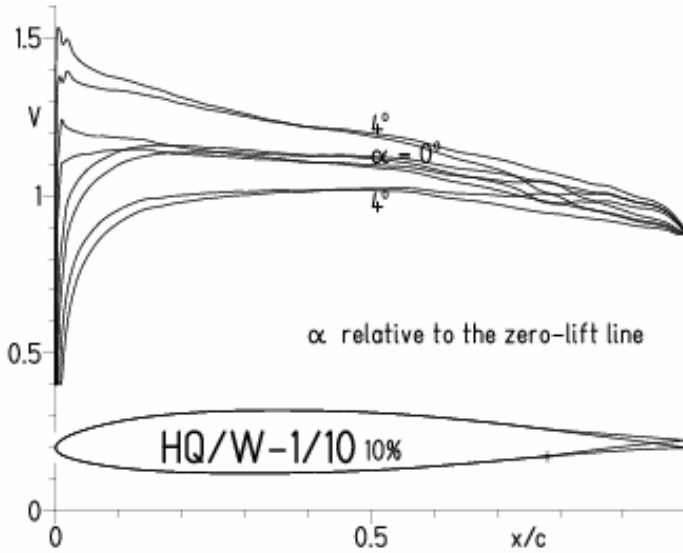


EPPLER 2005 V. 8.5.07 RUN

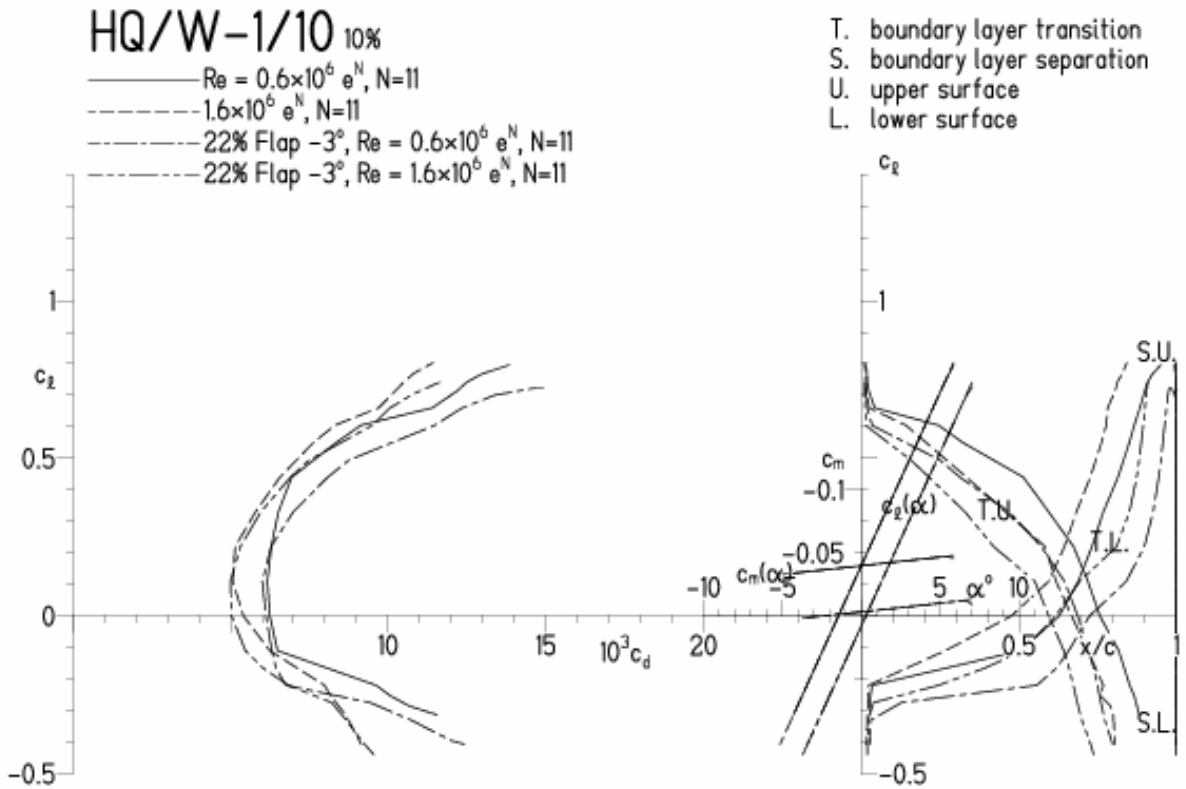


HQ/W-1/10, N=11, mit -3° Wölbklappenausschlag  
 (Segelmodelle haben damit das Potential für hohe Endgeschwindigkeiten)

EPPLER 2005 V. 8.5.07 RUN 28.5.11 17:35

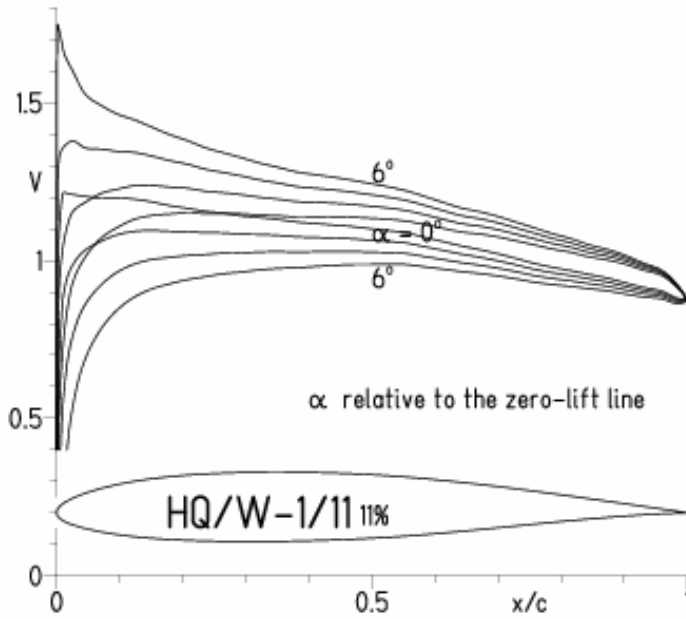


EPPLER 2005 V. 8.5.07 RUN 2

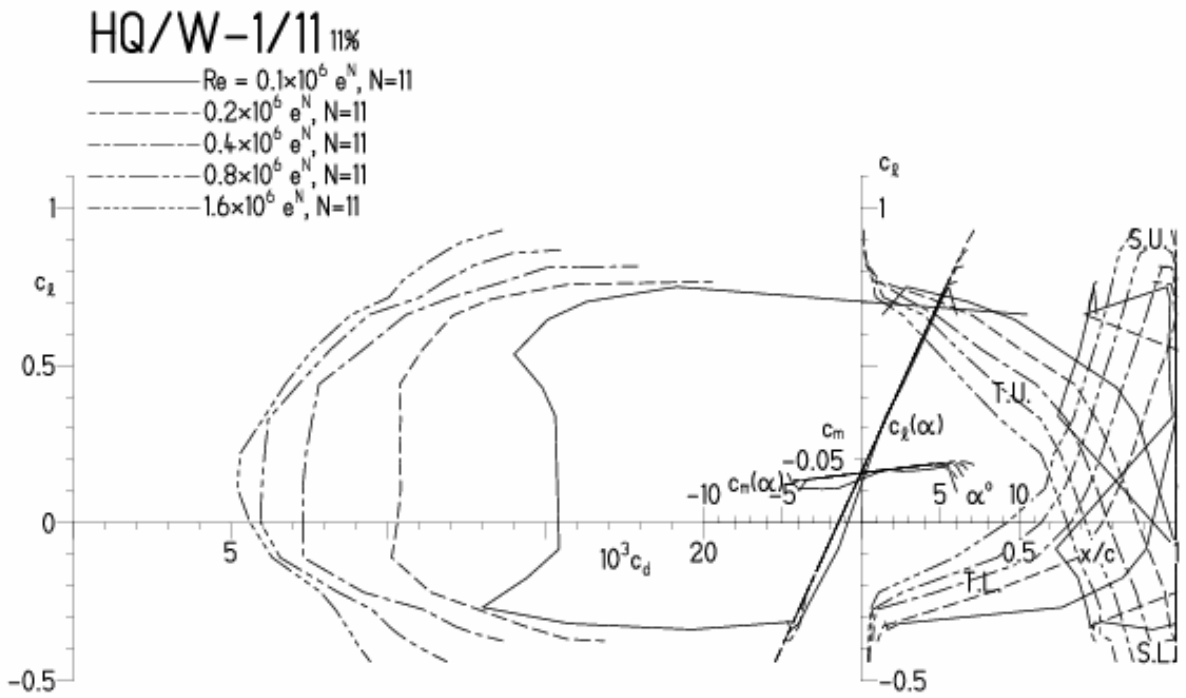


HQ/W-1/11, N=11

EPPLER 2005 V. 8.5.07 RUN 28.5.11 18:35

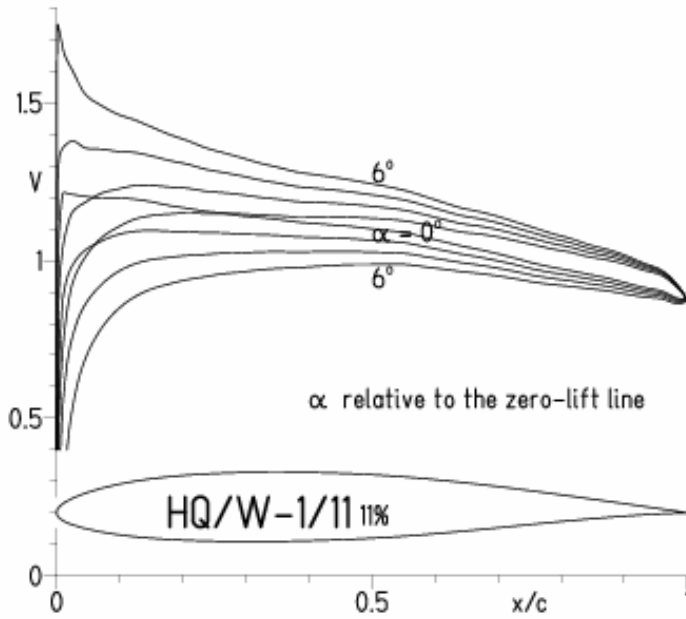


EPPLER 2005 V. 8.5.07 RUN 28.5.11 18:35

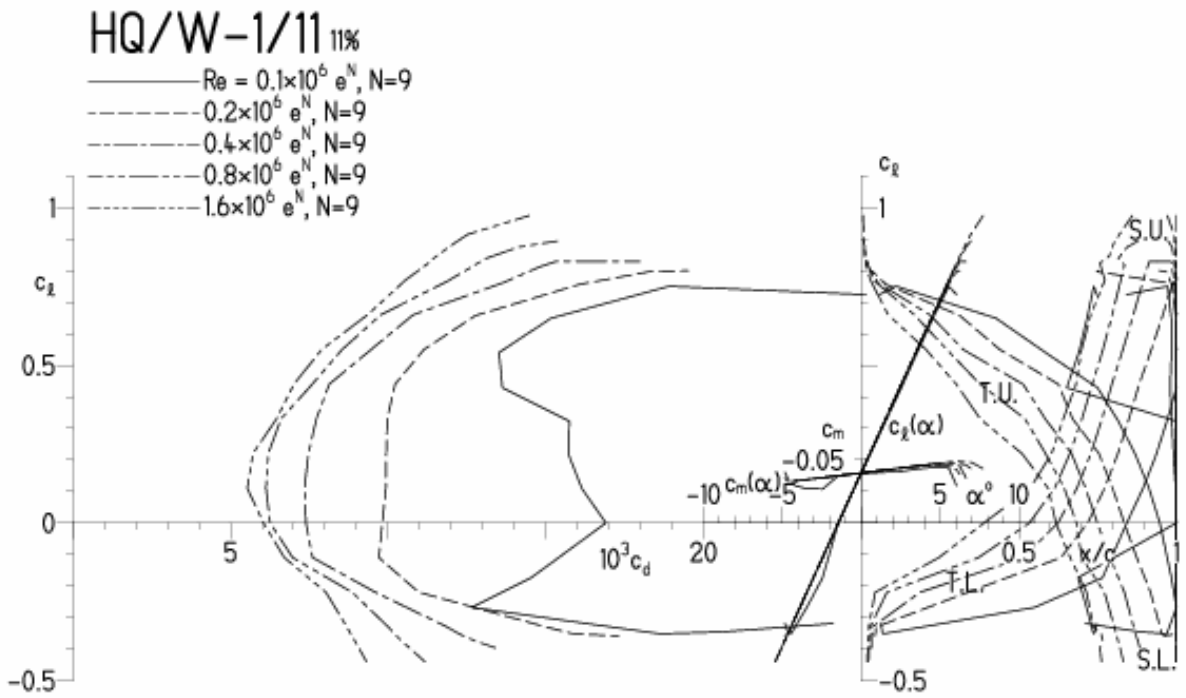


HQ/W-1/11, N=9

EPPLER 2005 V. 8.5.07 RUN 28.5.11 19:13

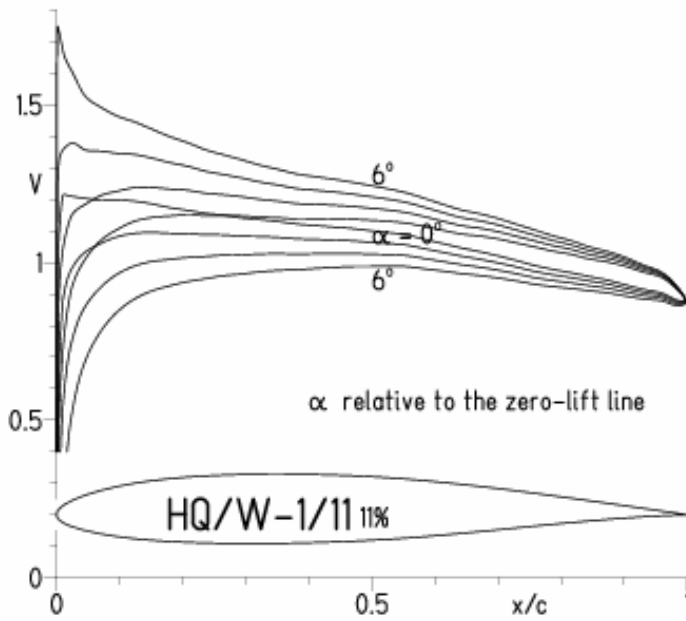


EPPLER 2005 V. 8.5.07 RU

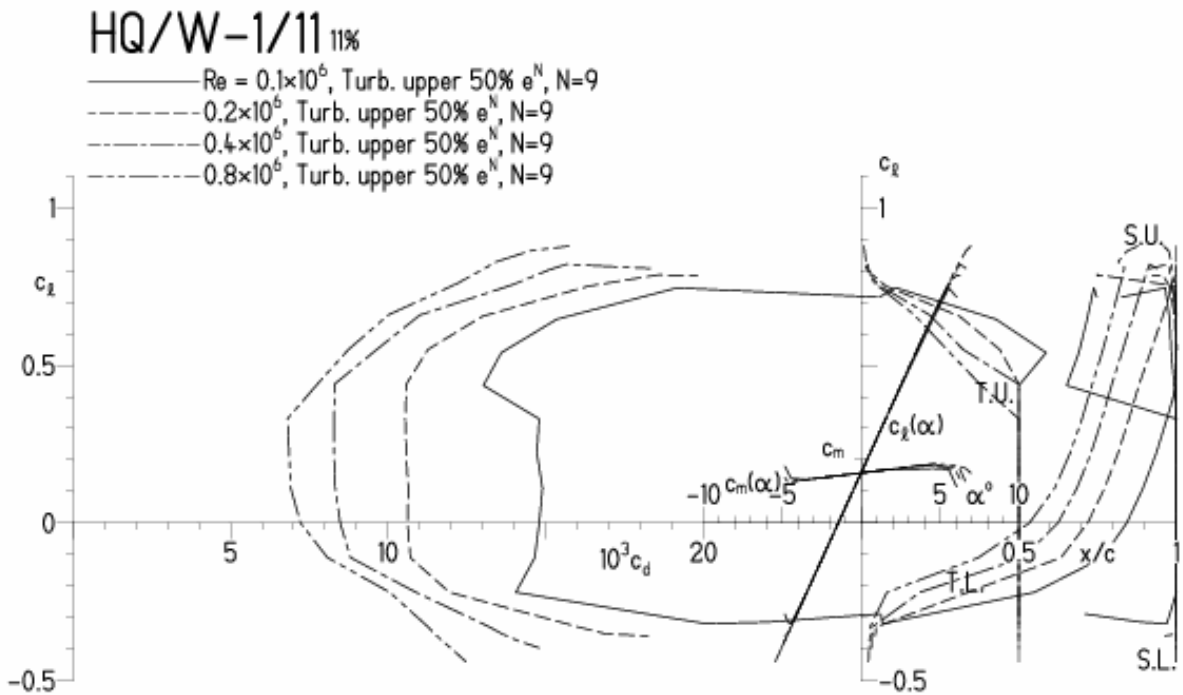


HQ/W-1/11, N=9, Turbulatoreffekt (optimal beim Maximum der Wölbung)

EPPLER 2005 V. 8.5.07 RUN 28.5.11 19:16

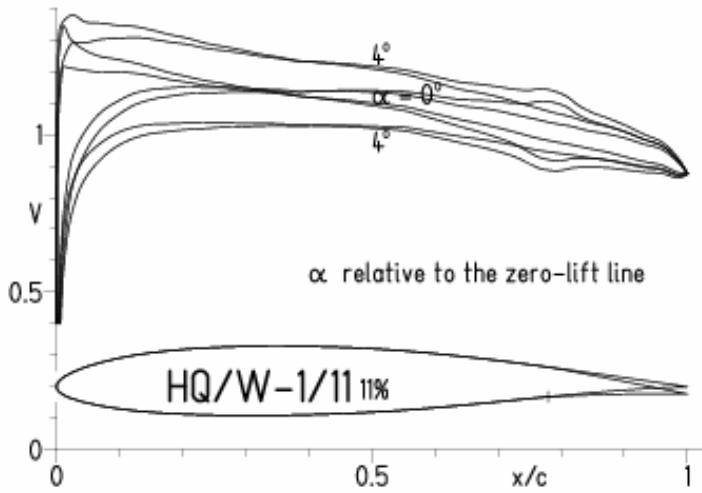


EPPLER 2005 V. 8.5.07 RUN 28.5.11 19:16

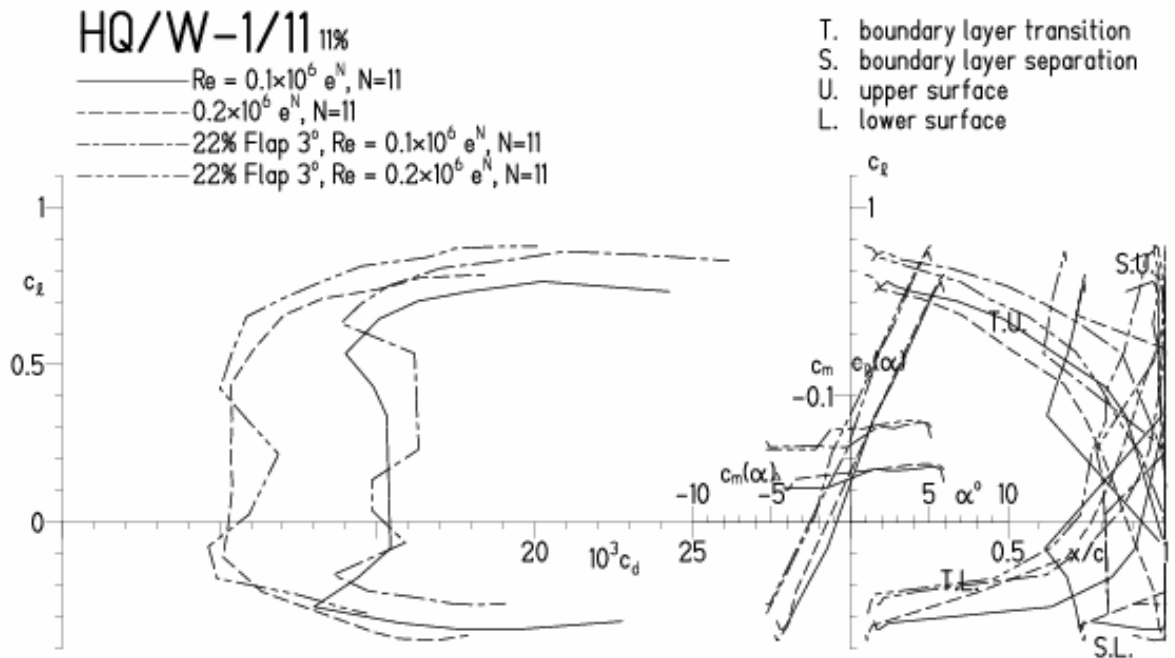


HQ/W-1/11, N=11, mit +3° Wölbklappenausschlag

EPPLER 2005 V. 8.5.07 RUN 31.5.11 10:56

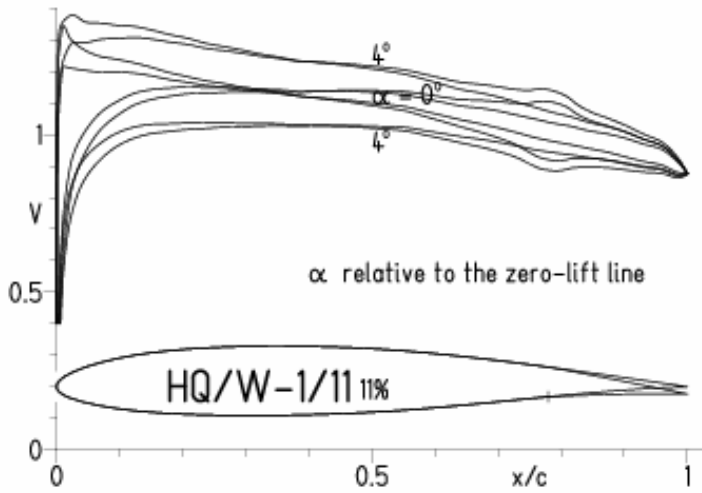


EPPLER 2005 V. 8.5.07 RUN 31.5.11 10:56

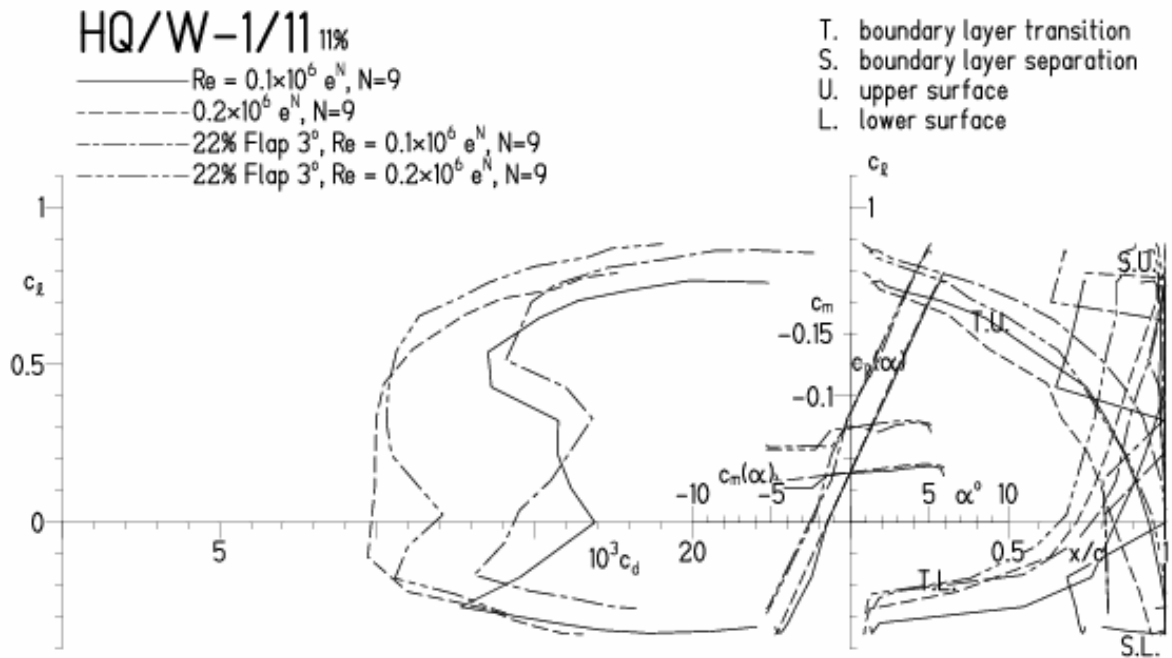


HQ/W-1/11, N=9, mit +3° Wölbklappenausschlag

EPPLER 2005 V. 8.5.07 RUN 315.11 11:01

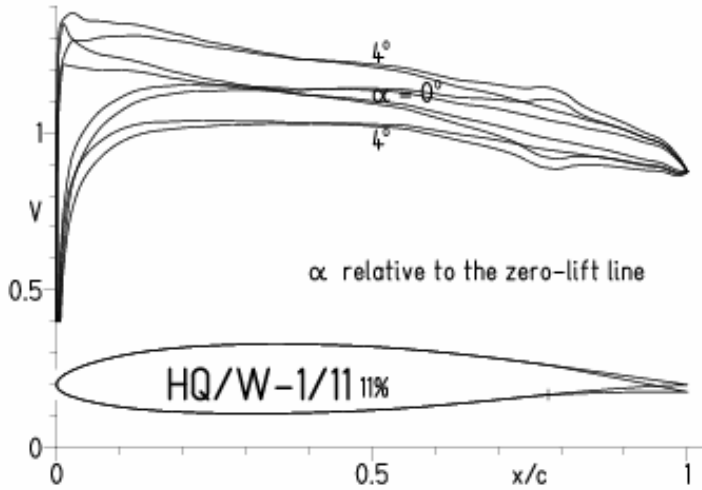


EPPLER 2005 V. 8.5.07 RUN 315.11 11:01

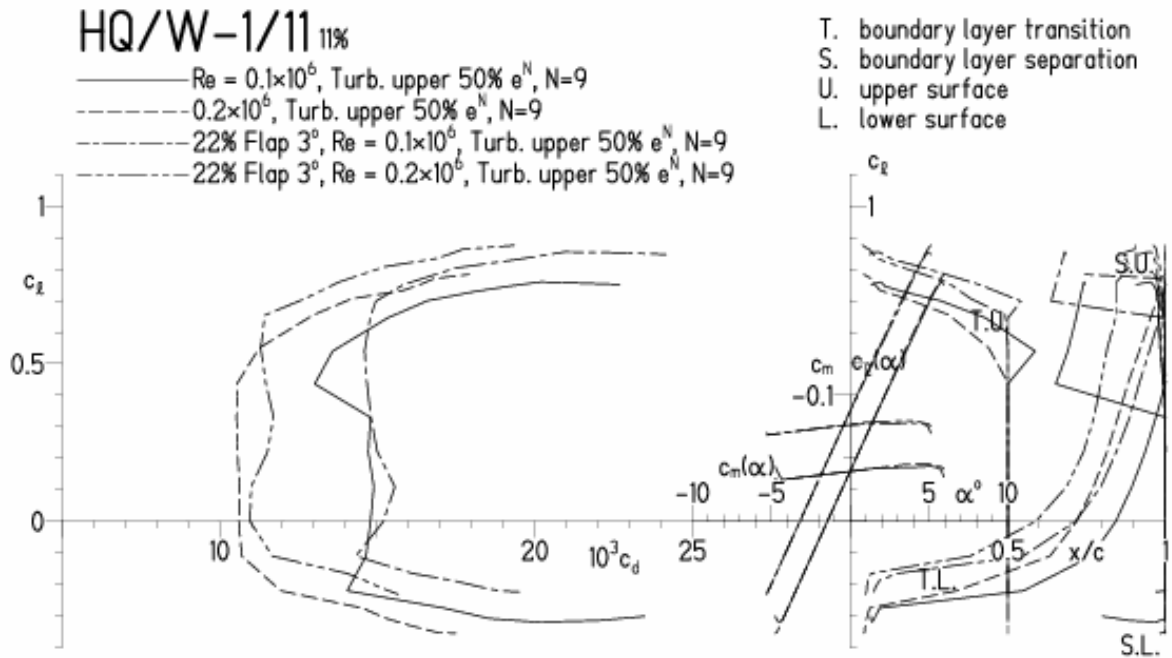


HQ/W-1/11, N=9, mit +3° Wölbklappenausschlag, Turbulatoreffekt  
 (Verbesserungen für niedrige Geschwindigkeiten und Profiltiefen an Flügelenden)

EPPLER 2005 V. 8.5.07 RUN 315.11 11:08

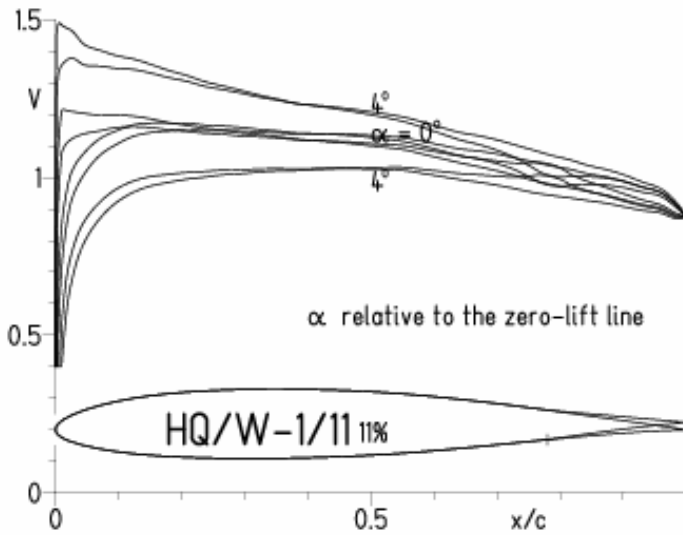


EPPLER 2005 V. 8.5.07 RUN 315.11 11:08

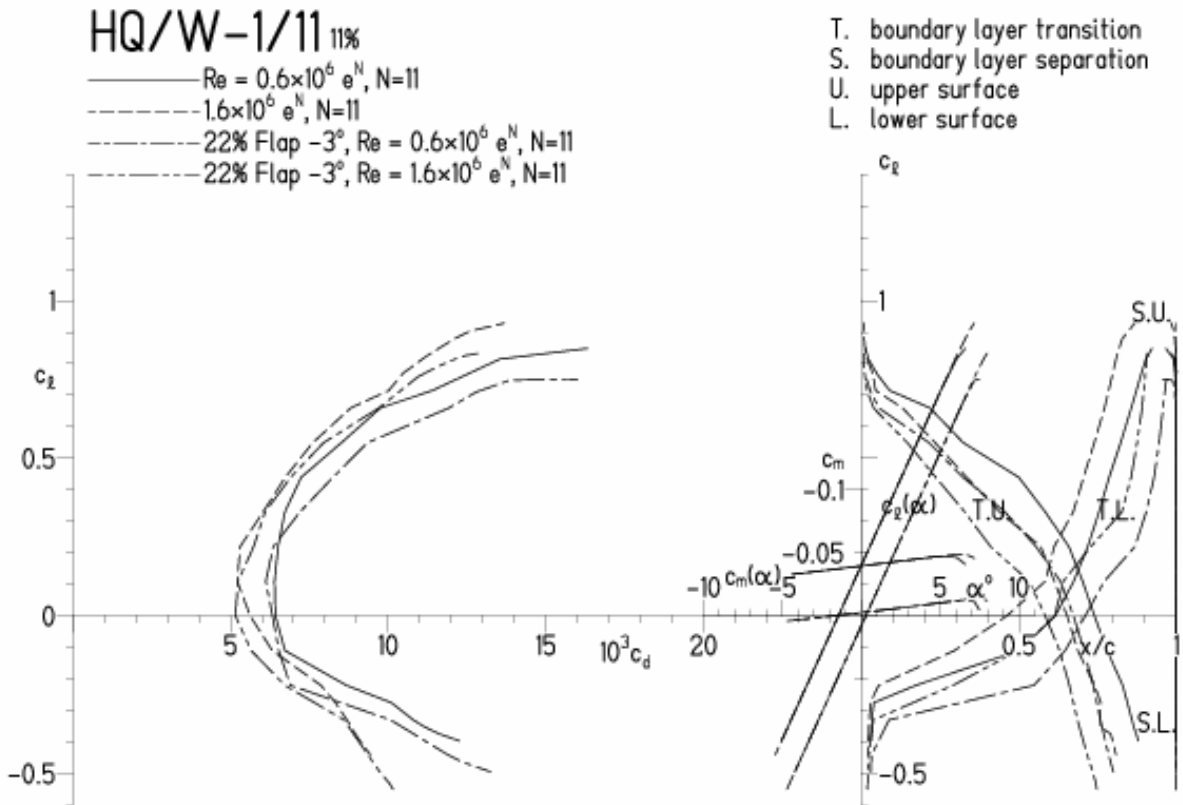


HQ/W-1/11, N=11, mit -3° Wölbklappenausschlag  
 (Segelmodelle haben damit das Potential für hohe Endgeschwindigkeiten)

EPPLER 2005 V. 8.5.07 RUN 315.11 1149

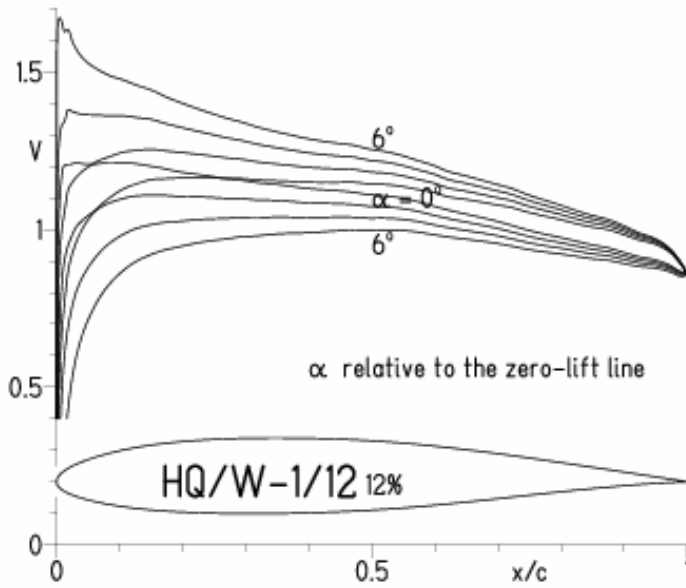


EPPLER 20

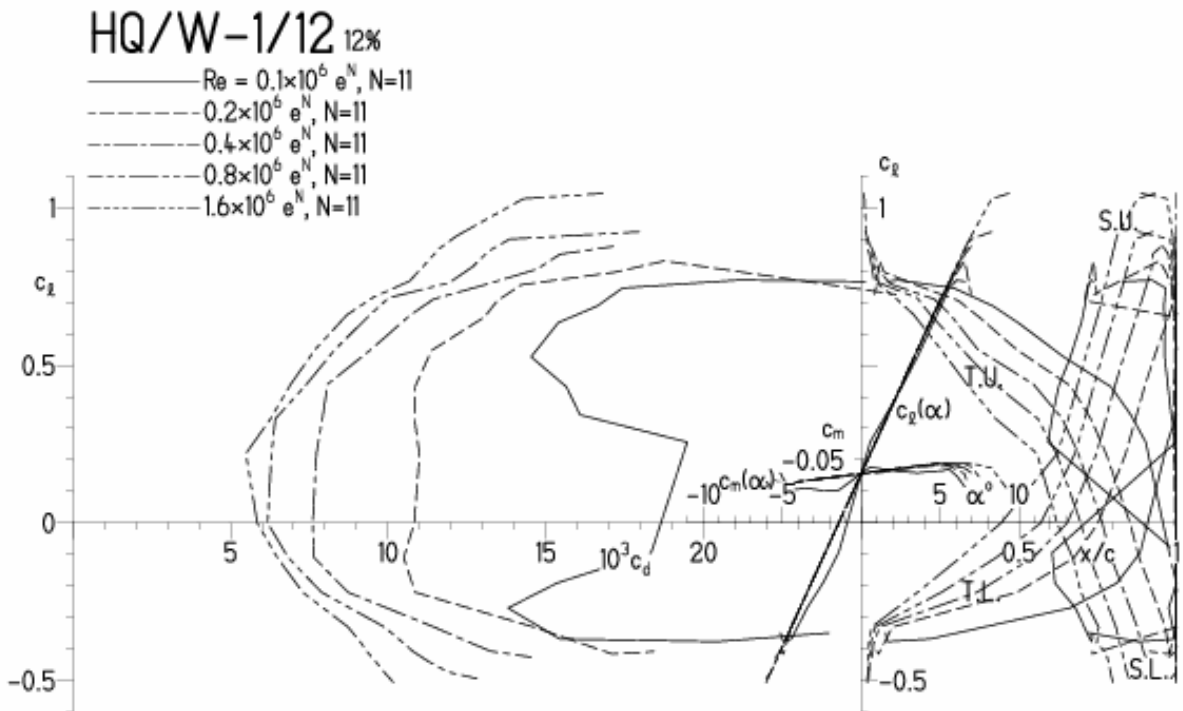


HQ/W-1/12, N=11

EPPLER 2005 V. 8.5.07 RUN 315.11 12:37

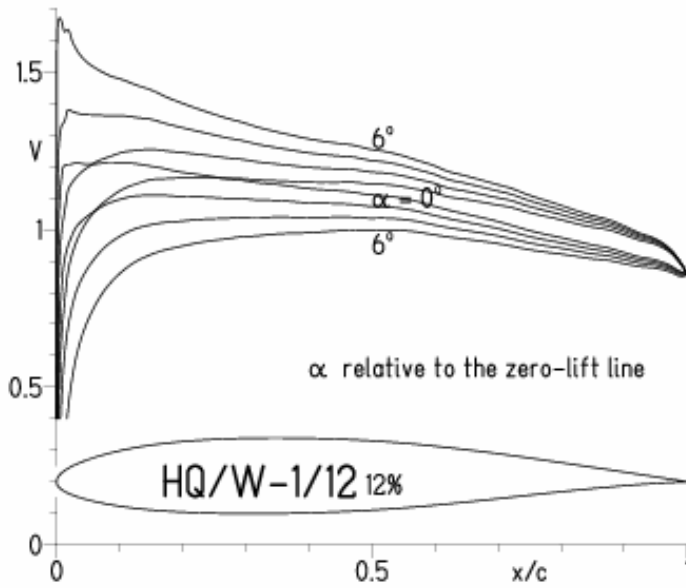


EPPLER 2005 V. 8.5.07 RUN 315.11 12:37

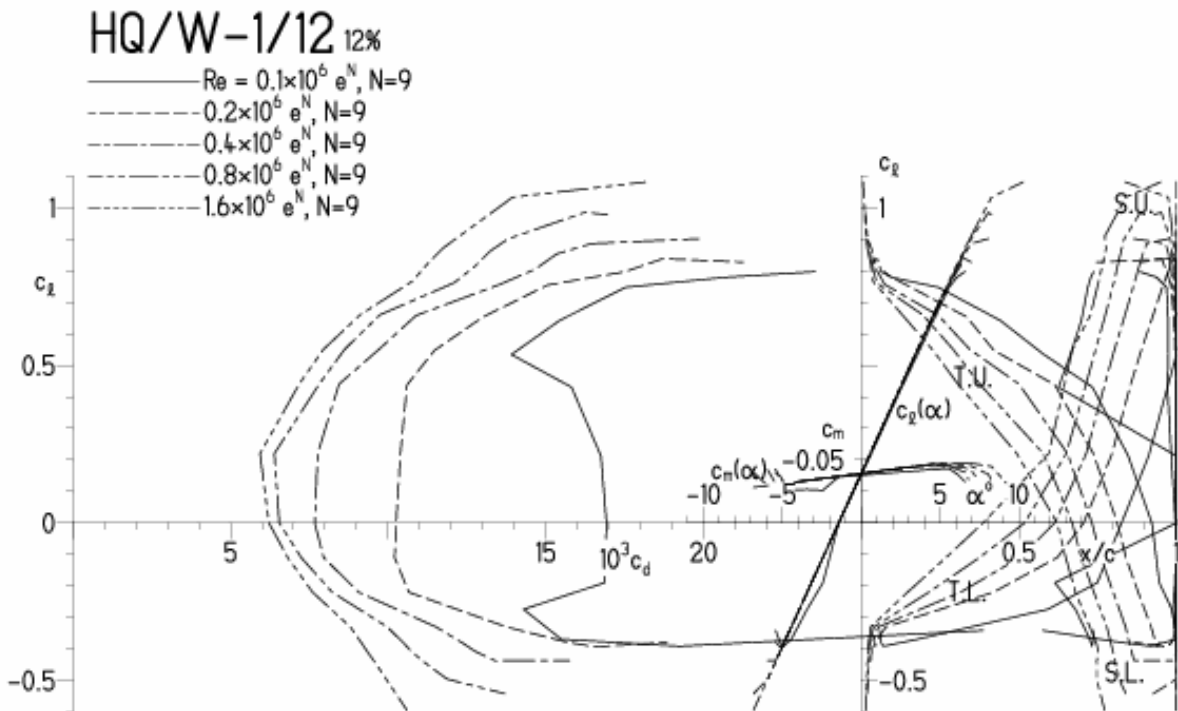


HQ/W-1/12, N=9

EPPLER 2005 V. 8.5.07 RUN 31.5.11 12:54

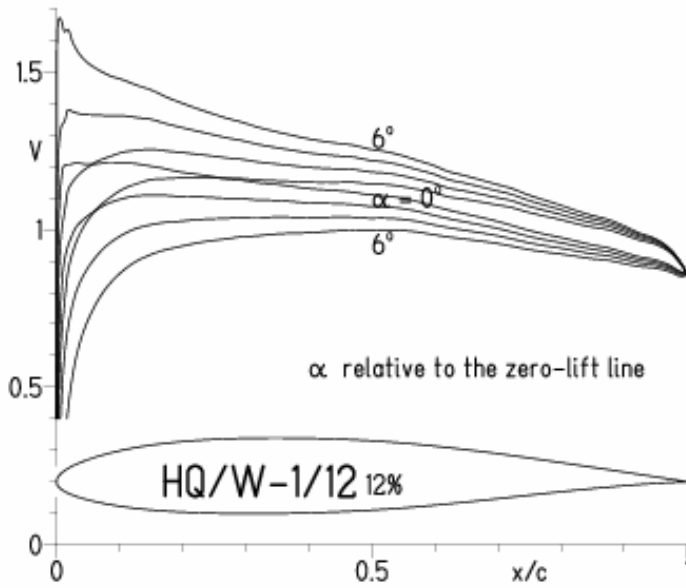


EPPLER 2005 V. 8.5.07 RUN 31.5.11 12:54

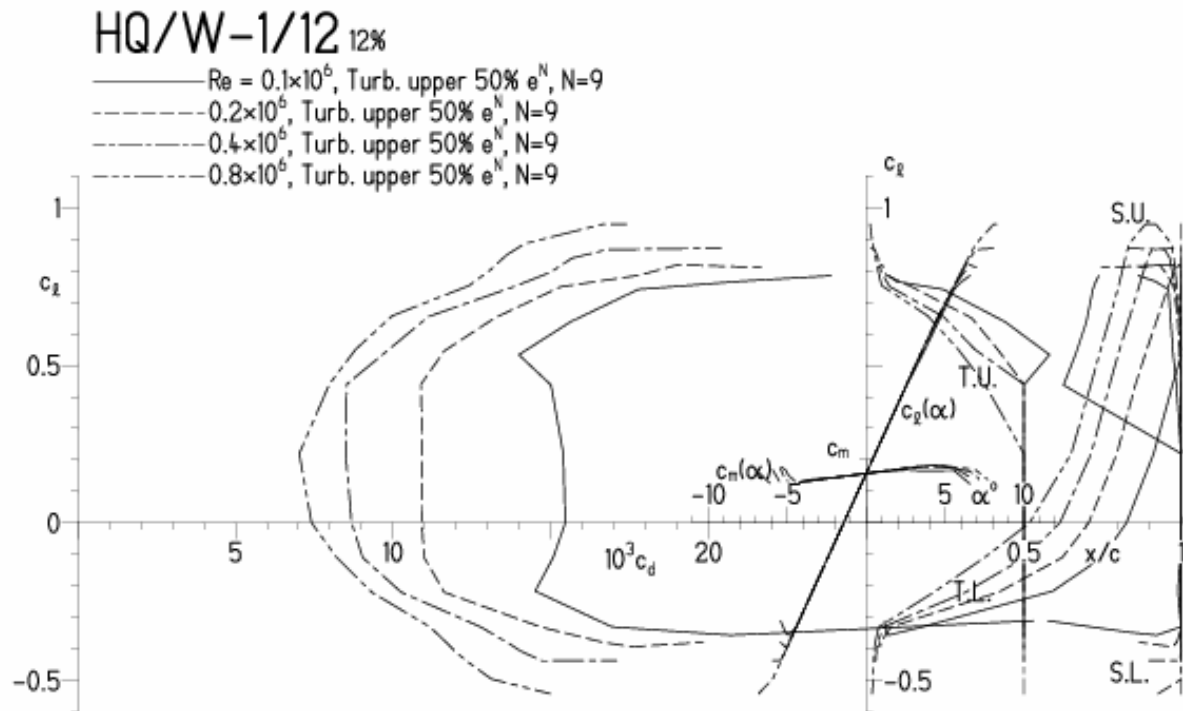


HQ/W-1/12, N=9, Turbulatoreffekt (optimal beim Maximum der Wölbung)

EPPLER 2005 V. 8.5.07 RUN 31.5.11 12:57

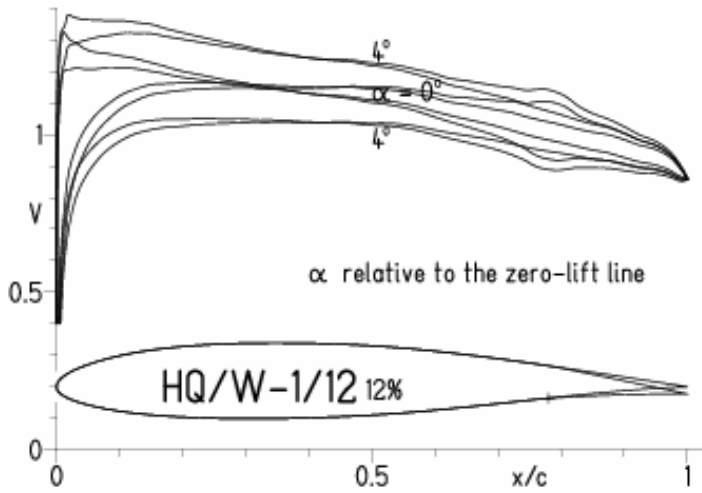


EPPLER 2005 V. 8.5.07 RUN 31.5.11 12:57

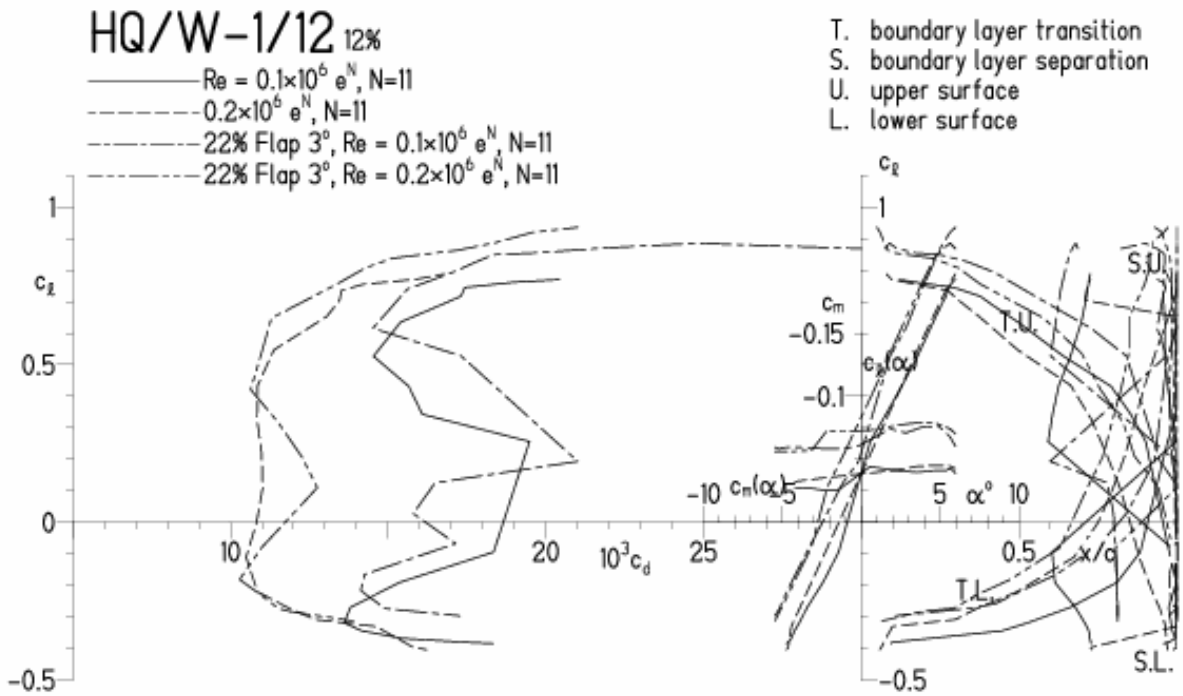


HQ/W-1/12, N=11, mit +3° Wölbklappenausschlag

EPPLER 2005 V. 8.5.07 RUN 31.5.11 16:05

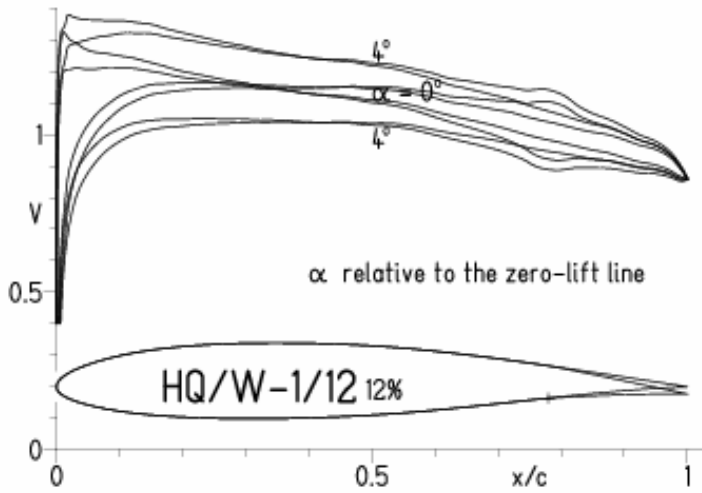


EPPLER 2005 V. 8.5.07 RUN 31.5.11 16:05

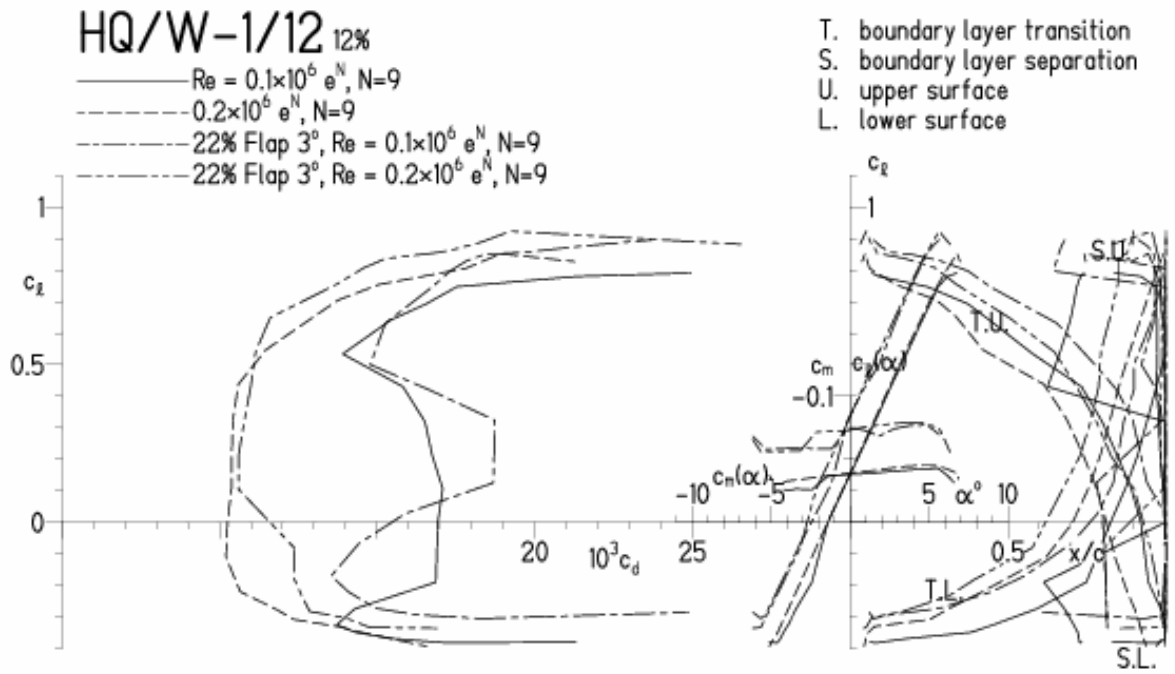


HQ/W-1/12, N=9, mit +3° Wölbklappenausschlag

EPPLER 2005 V. 8.5.07 RUN 31.5.11 16:25

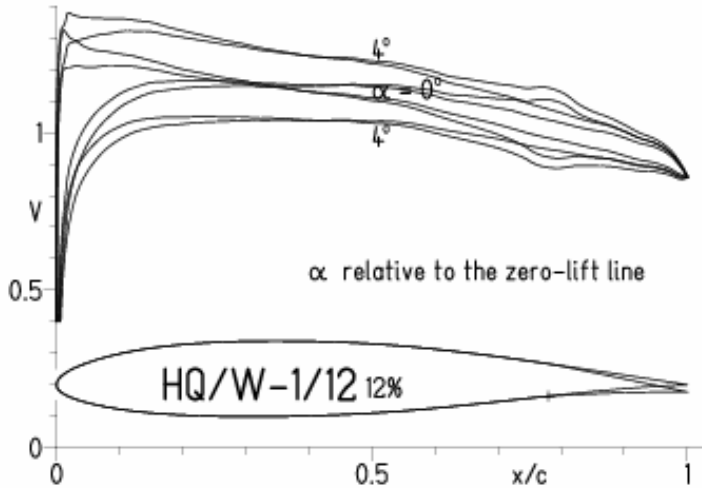


EPPLER 2005 V. 8.5.07 RUN 31.5.11 16:25

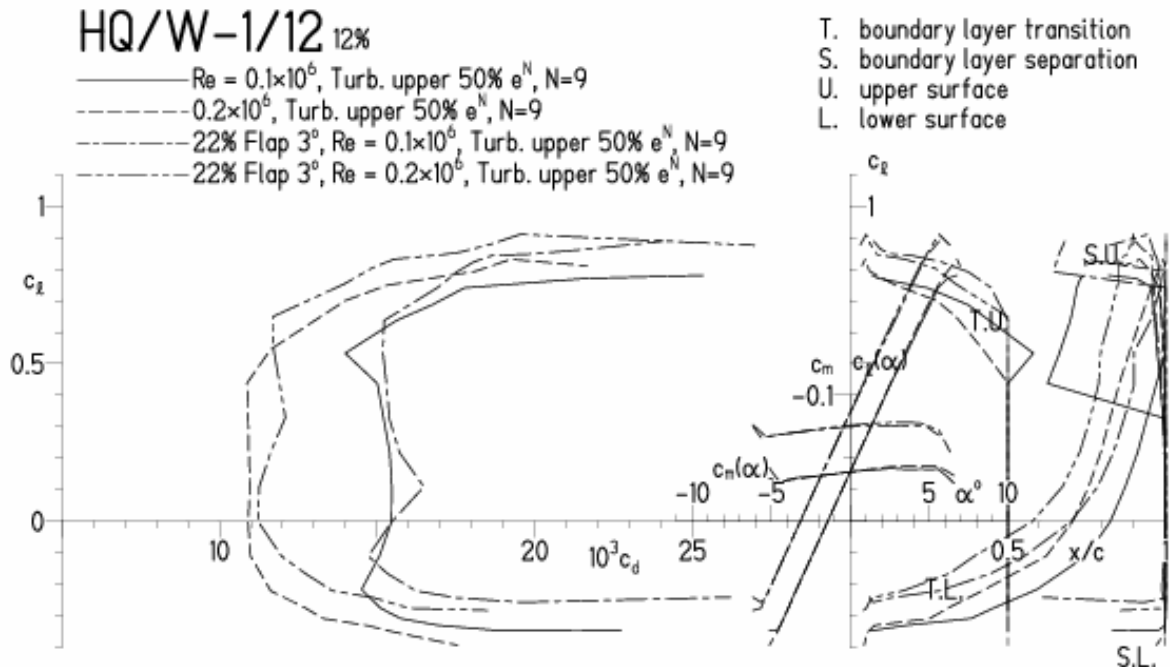


**HQ/W-1/12, N=9, mit +3° Wölbklappenausschlag, Turbulatoreffekt**  
 (Verbesserungen für niedrige Geschwindigkeiten und Profiltiefen an Flügelenden)

EPPLER 2005 V. 8.5.07 RUN 315.11 16:28

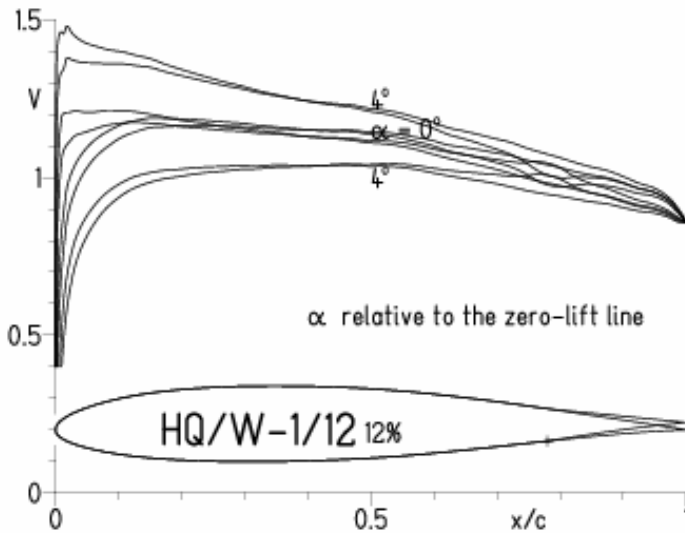


EPPLER 2005 V. 8.5.07 RUN 315.11 16:28



HQ/W-1/12, N=11, mit -3° Wölbklappenausschlag  
 (Segelmodelle haben damit das Potential für hohe Endgeschwindigkeiten)

EPPLER 2005 V. 8.5.07 RUN 315.11 16:55



EPPLER 2005 V. 8.5.07 RUN 315.11 16:55

