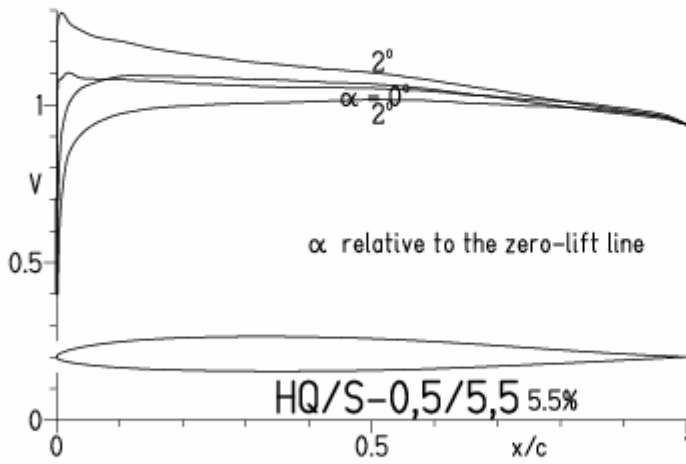
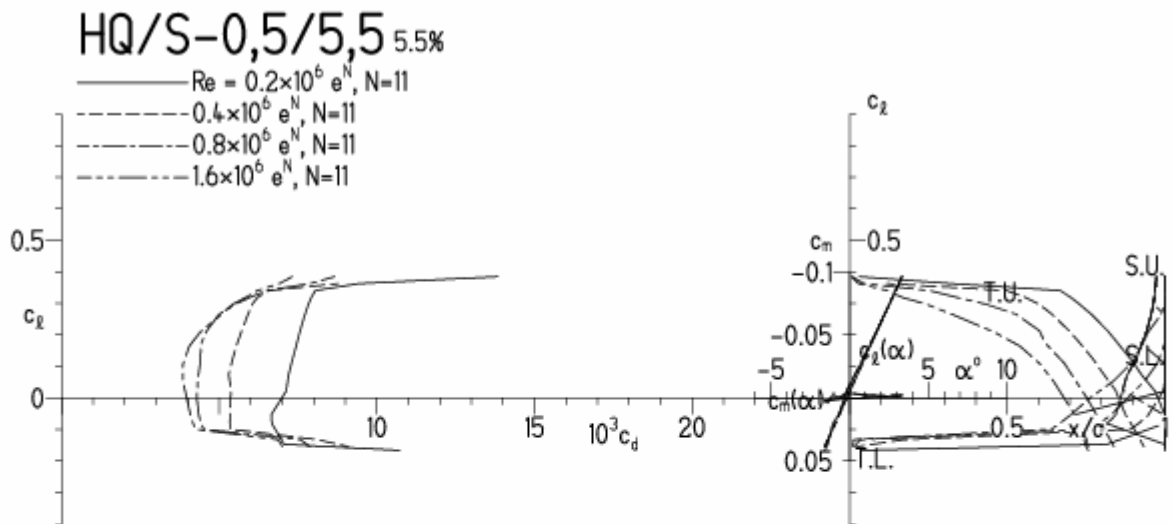


# HQ/S-0,5/5,5 , N=11

EPPLER 2005 V. 8.5.07 RUN 26.3.10 13:17

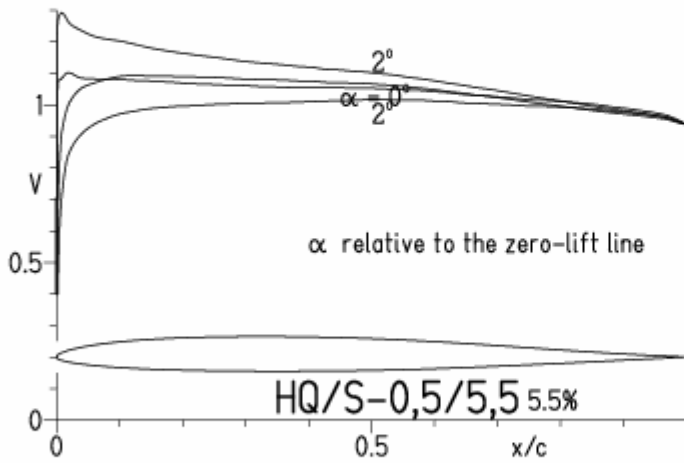


EPPLER 2005 V. 8.5.07 RUN 26.3.10 13:17

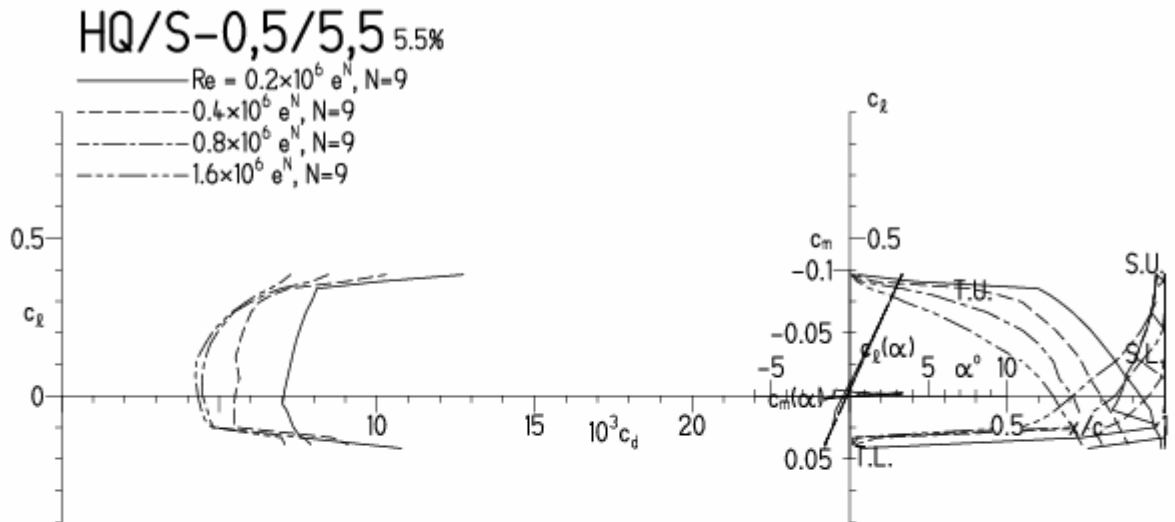


# HQ/S-0,5/5,5 , N=9

EPPLER 2005 V. 8.5.07 RUN 26.3.10 13:20

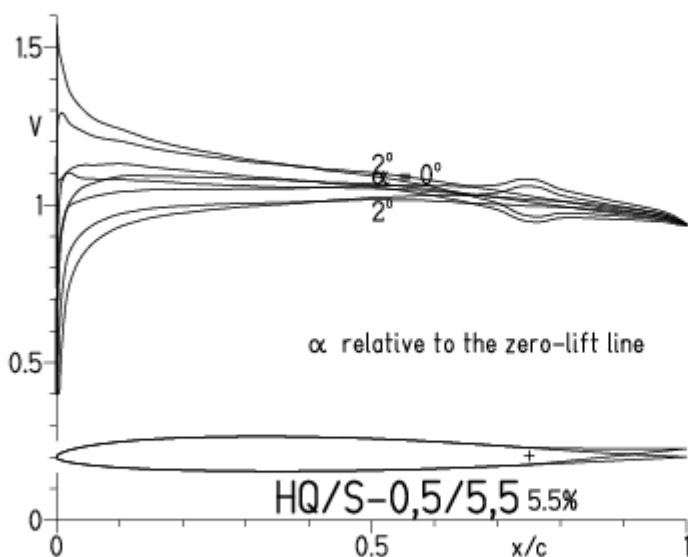


EPPLER 2005 V. 8.5.07 RUN



HQ/S-0,5/5,5 , N=11, Wölbklappen -3°,  $c_{mo} \sim +0,033$  bei  $c_a=0$

EPPLER 2005 V. 8.5.07 RUN 17.3.10 17:55

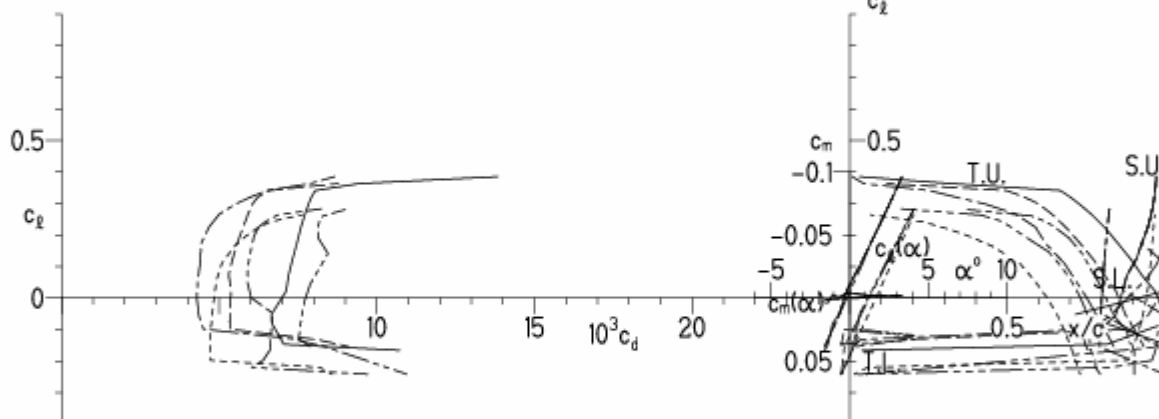


EPPLER 2005 V.

**HQ/S-0,5/5,5 5.5%**

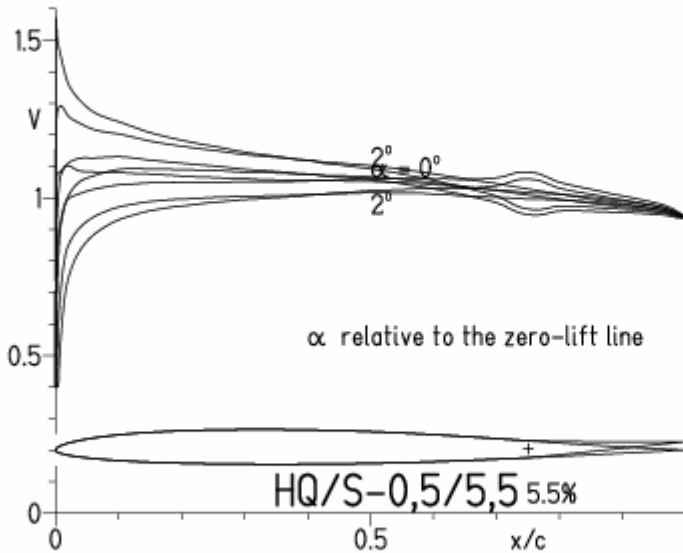
- $Re = 0.2 \times 10^6 e^N, N=11$
- - -  $0.4 \times 10^6 e^N, N=11$
- - -  $0.8 \times 10^6 e^N, N=11$
- - - 25% Flap -3°,  $Re = 0.2 \times 10^6 e^N, N=11$
- - - 25% Flap -3°,  $Re = 0.4 \times 10^6 e^N, N=11$
- - - 25% Flap -3°,  $Re = 0.8 \times 10^6 e^N, N=11$

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



HQ/S-0,5/5,5 , N=9, Wölbklappen -3°,  $c_{mo} \sim +0,033$  bei  $c_a=0$

EPPLER 2005 V. 8.5.07 RUN 17.3.10 17:59

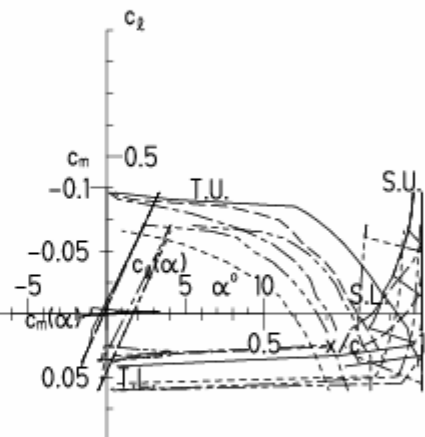
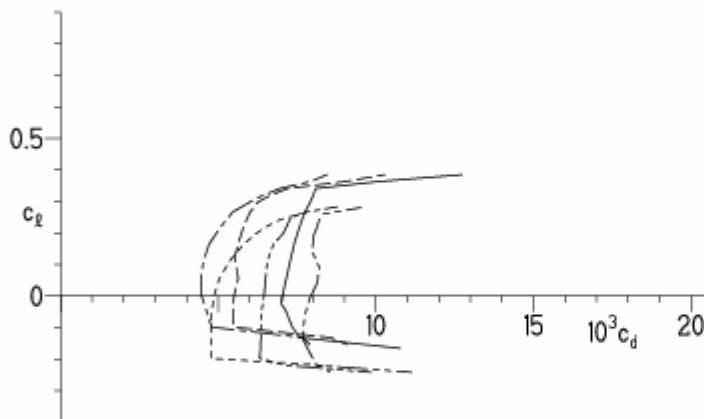


EPPLER 2005 V. 8.5.07 RUN 17.3.10 17:59

**HQ/S-0,5/5,5 5.5%**

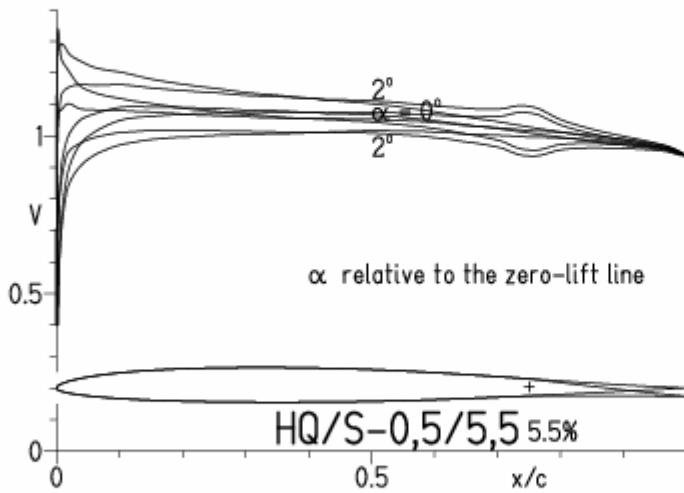
- $Re = 0.2 \times 10^6 e^N, N=9$
- - -  $0.4 \times 10^6 e^N, N=9$
- - -  $0.8 \times 10^6 e^N, N=9$
- - - 25% Flap -3°,  $Re = 0.2 \times 10^6 e^N, N=9$
- - - 25% Flap -3°,  $Re = 0.4 \times 10^6 e^N, N=9$
- - - 25% Flap -3°,  $Re = 0.8 \times 10^6 e^N, N=9$

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



# HQ/S-0,5/5,5 , N=11, Wölbklappen +3°

EPPLER 2005 V. 8.5.07 RUN 24.3.10 10:03

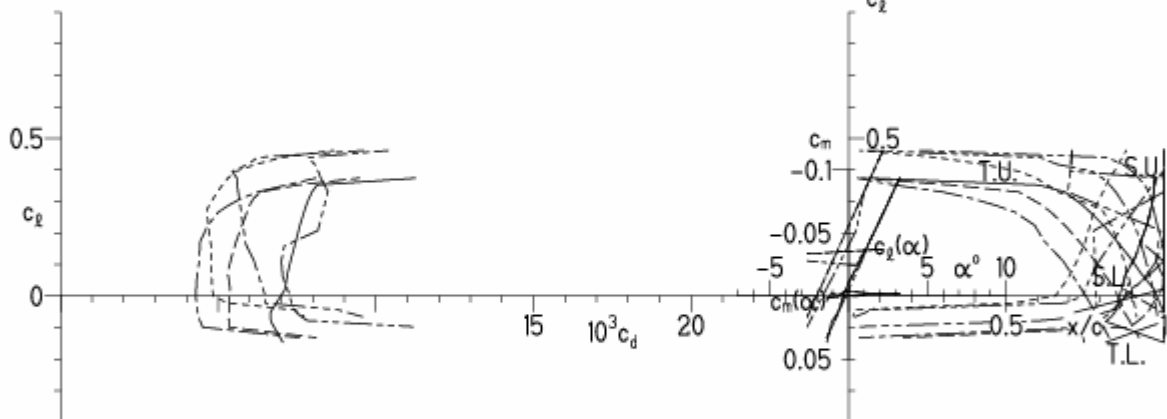


EPPLER 2005 V. 8.5.07 RUN 24.3.10 10:03

## HQ/S-0,5/5,5 5.5%

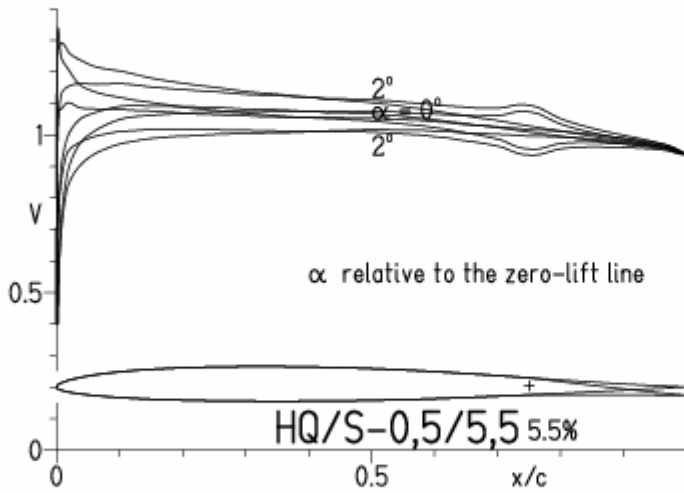
- $Re = 0.2 \times 10^6 e^N, N=11$
- - -  $0.4 \times 10^6 e^N, N=11$
- · -  $0.8 \times 10^6 e^N, N=11$
- · - 25% Flap 3°,  $Re = 0.2 \times 10^6 e^N, N=11$
- · - 25% Flap 3°,  $Re = 0.4 \times 10^6 e^N, N=11$
- · - 25% Flap 3°,  $Re = 0.8 \times 10^6 e^N, N=11$

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



# HQ/S-0,5/5,5 , N=9, Wölbklappen +3°

EPPLER 2005 V. 8.5.07 RUN 24.3.10 10:05

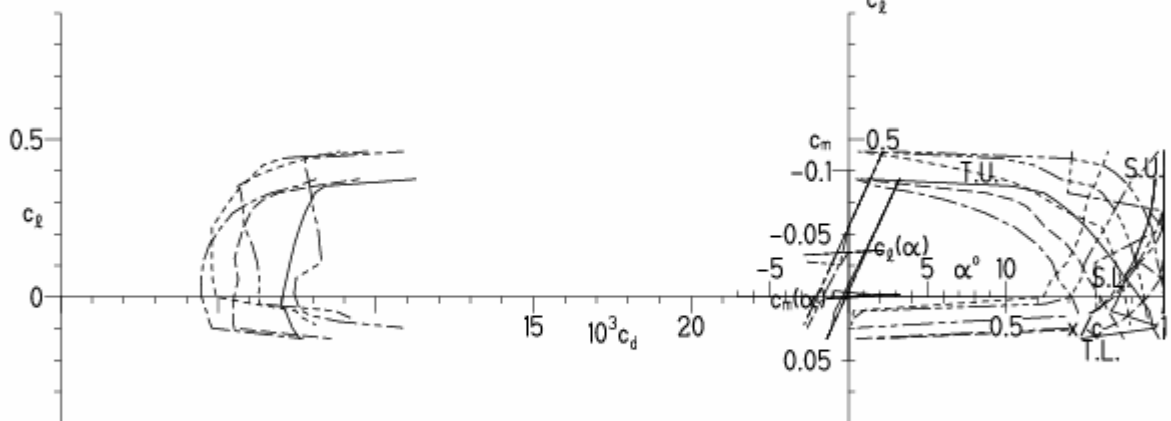


EPPLER 2005 V. 8.5.07 RUN 24.3.1

## HQ/S-0,5/5,5 5.5%

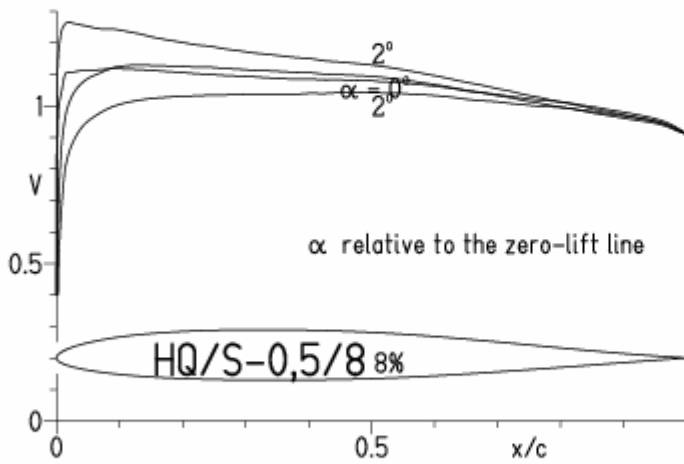
- $Re = 0.2 \times 10^6 e^N, N=9$
- - -  $0.4 \times 10^6 e^N, N=9$
- · -  $0.8 \times 10^6 e^N, N=9$
- · - · 25% Flap  $3^\circ, Re = 0.2 \times 10^6 e^N, N=9$
- · - · - 25% Flap  $3^\circ, Re = 0.4 \times 10^6 e^N, N=9$
- · - · - · 25% Flap  $3^\circ, Re = 0.8 \times 10^6 e^N, N=9$

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

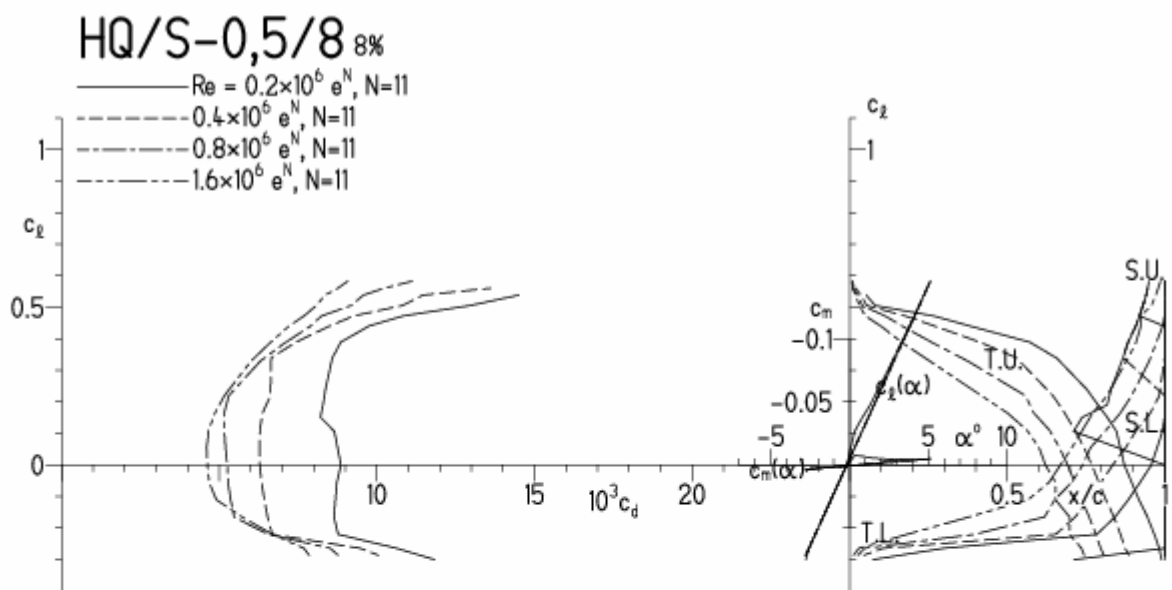


# HQ/S-0,5/8, N=11

EPPLER 2005 V. 8.5.07 RUN 26.3.10 12:06

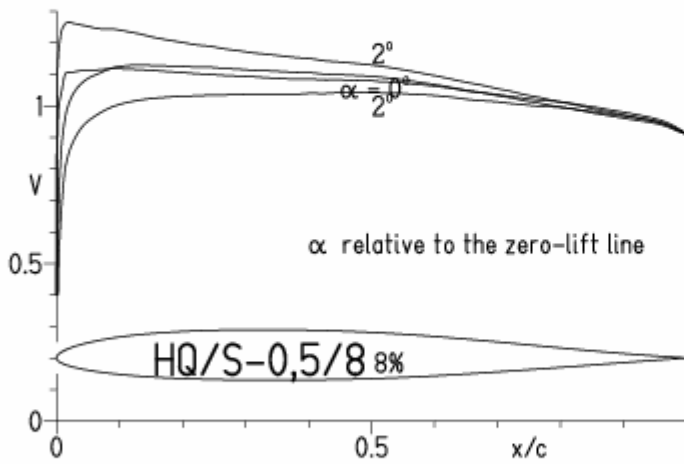


EPPLER 2005 V. 8.5.07 RUN

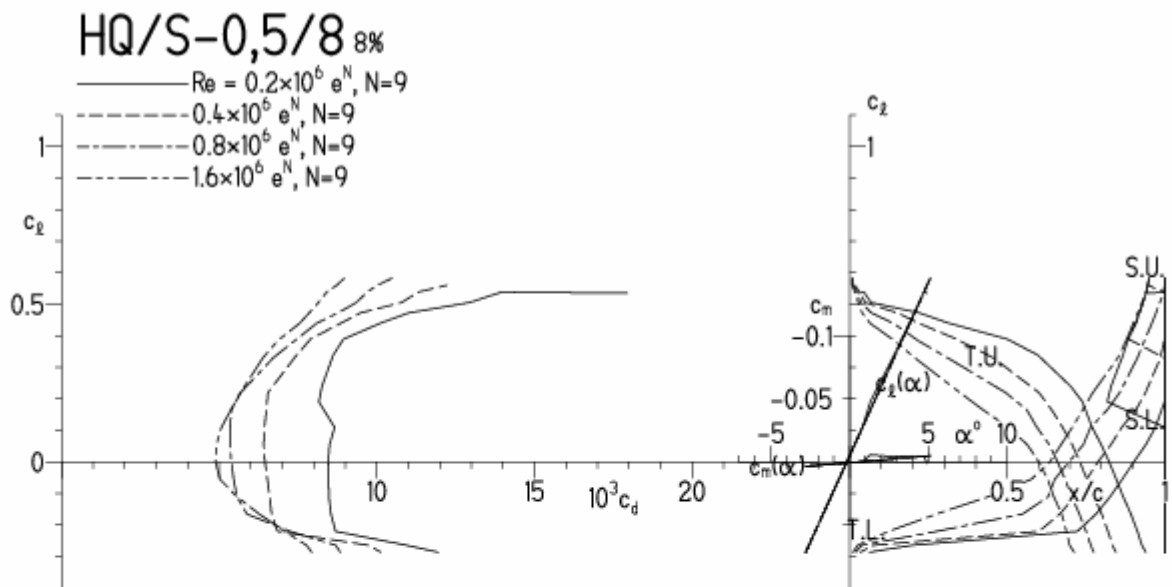


# HQ/S-0,5/8, N=9

EPPLER 2005 V. 8.5.07 RUN 26.3.10 12:11

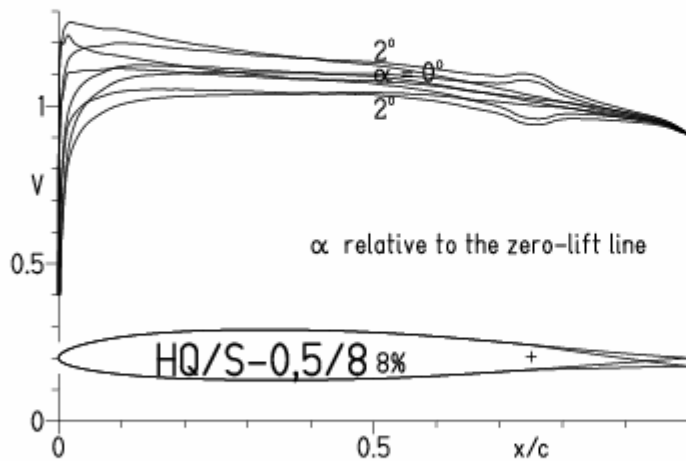


EPPLER 2005 V. 8.5.07 RUN 26.3.10 12:11



# HQ/S-0,5/8 , N=11, Wölbklappen +3°

EPPLER 2005 V. 8.5.07 RUN 26.3.10 13:08

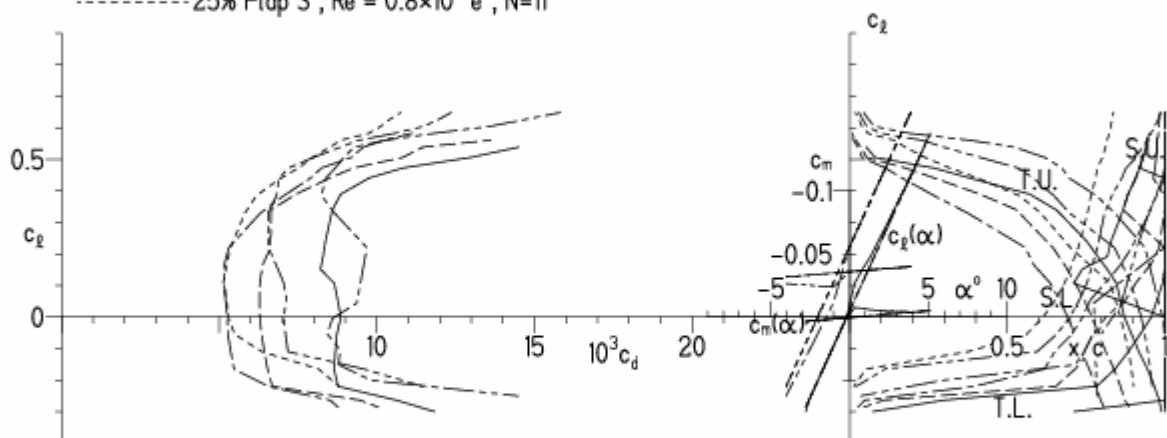


EPPLER 2005 V.

## HQ/S-0,5/8 8%

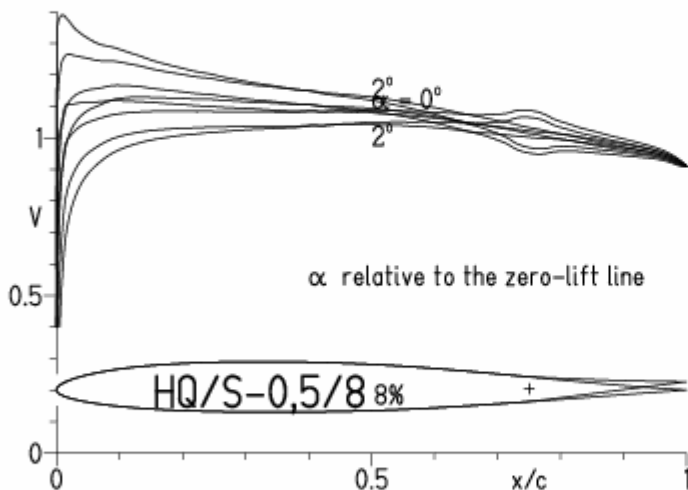
- $Re = 0.2 \times 10^6 e^N, N=11$
- - -  $0.4 \times 10^6 e^N, N=11$
- · -  $0.8 \times 10^6 e^N, N=11$
- · - · 25% Flap  $3^\circ, Re = 0.2 \times 10^6 e^N, N=11$
- · - · - 25% Flap  $3^\circ, Re = 0.4 \times 10^6 e^N, N=11$
- · - · - · 25% Flap  $3^\circ, Re = 0.8 \times 10^6 e^N, N=11$

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



HQ/S-0,5/8 , N=9, Wölbklappen -3°,  $c_{mo} \sim +0,035$  bei  $c_a=0$

EPPLER 2005 V. 8.5.07 RUN 26.3.10 12:33

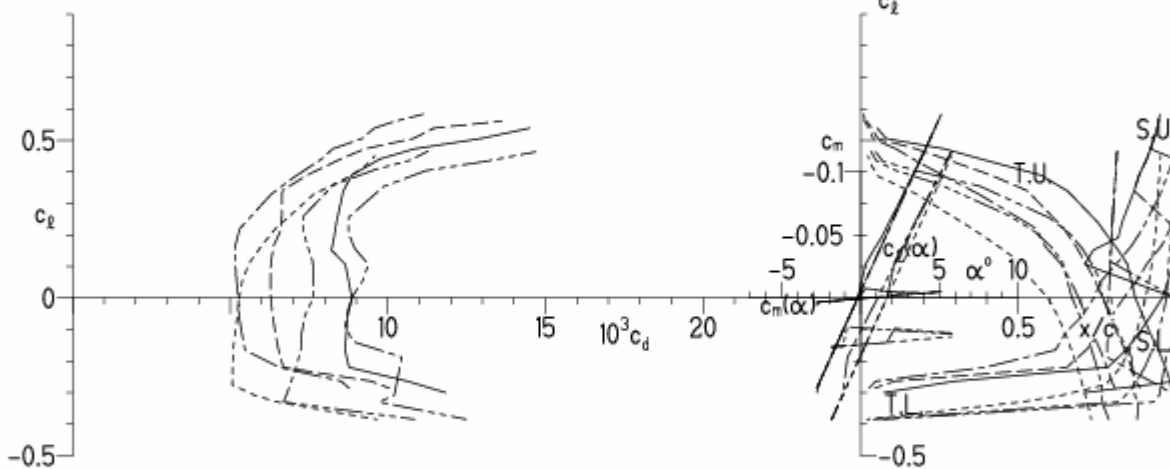


EPPLER 2005 V. 8.5.07 RUN 26.3.10 1

HQ/S-0,5/8 8%

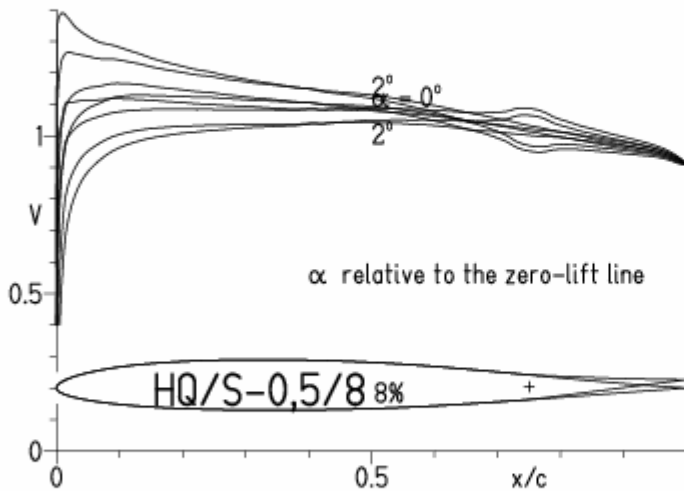
- $Re = 0.2 \times 10^6 e^N, N=11$
- - -  $0.4 \times 10^6 e^N, N=11$
- - -  $0.8 \times 10^6 e^N, N=11$
- - - 25% Flap -3°,  $Re = 0.2 \times 10^6 e^N, N=11$
- - - 25% Flap -3°,  $Re = 0.4 \times 10^6 e^N, N=11$
- - - 25% Flap -3°,  $Re = 0.8 \times 10^6 e^N, N=11$

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



HQ/S-0,5/8 , N=9, Wölbklappen  $-3^\circ$ ,  $c_{mo} \sim +0,035$  bei  $c_a=0$

EPPLER 2005 V. 8.5.07 RUN 26.3.10 12:44

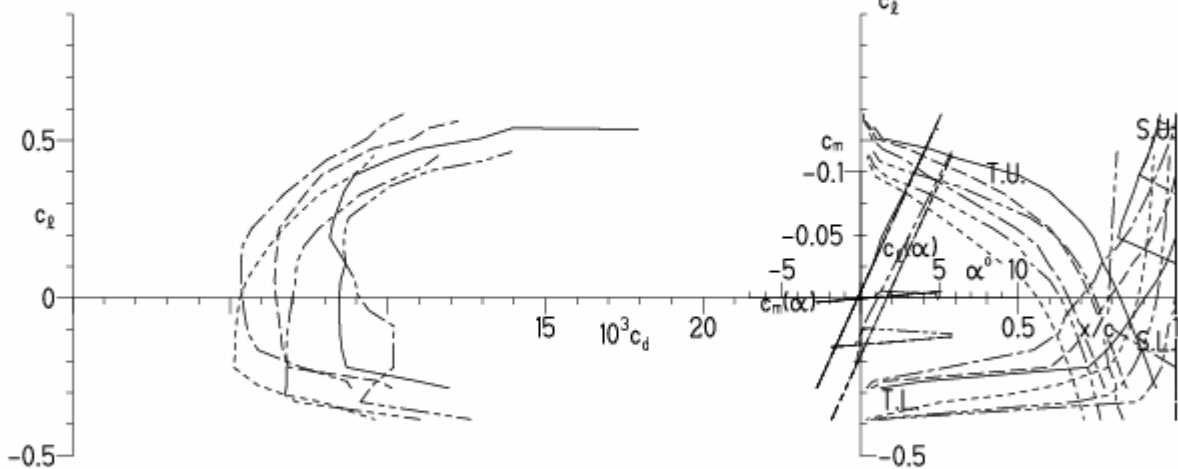


EPPLER 2005 V. 8.5.07 RUN 26.3.1

**HQ/S-0,5/8 8%**

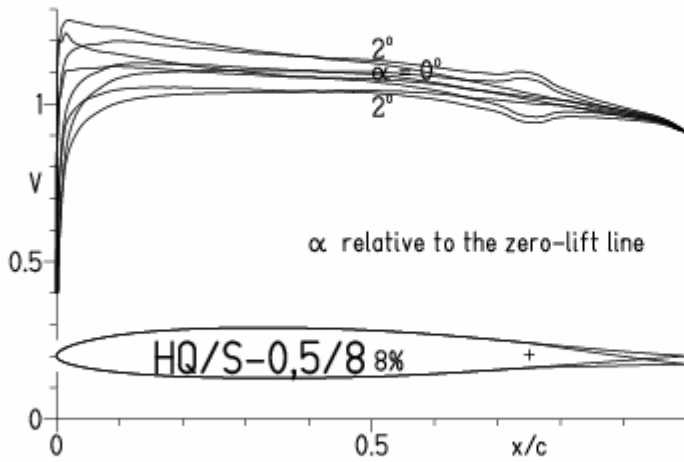
- $Re = 0.2 \times 10^6$   $e^N$ , N=9
- - -  $0.4 \times 10^6$   $e^N$ , N=9
- - -  $0.8 \times 10^6$   $e^N$ , N=9
- - - 25% Flap  $-3^\circ$ ,  $Re = 0.2 \times 10^6$   $e^N$ , N=9
- - - 25% Flap  $-3^\circ$ ,  $Re = 0.4 \times 10^6$   $e^N$ , N=9
- - - 25% Flap  $-3^\circ$ ,  $Re = 0.8 \times 10^6$   $e^N$ , N=9

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



# HQ/S-0,5/8 , N=11, Wölbklappen +3°

EPPLER 2005 V. 8.5.07 RUN 26.3.10 13:01



EPPLER 2005 V. 8.5.07 RUN 26.3.10 1

## HQ/S-0,5/8 8%

- $Re = 0.2 \times 10^6 e^N, N=9$
- - -  $0.4 \times 10^6 e^N, N=9$
- · -  $0.8 \times 10^6 e^N, N=9$
- · - · 25% Flap  $3^\circ, Re = 0.2 \times 10^6 e^N, N=9$
- · - · - 25% Flap  $3^\circ, Re = 0.4 \times 10^6 e^N, N=9$
- · - · - · 25% Flap  $3^\circ, Re = 0.8 \times 10^6 e^N, N=9$

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

