

# CAD COLOUR CODES

## COLOUR CODES FOR SURFACES AND SOLID BODIES

RGB COLOUR			TOLERANCE IN MM/OFFSET SURFACE	POSITION TOLERANCE	SURFACE	APPLICATION EXAMPLES/COMMENTS
R	G	B				
000	164	164				Meusburger standard
183	183	220			Ra 0.8-3.2	Base body surfaces/CAD colour system
255	255	000		±0.10		All kinds of threads/diameter of the core according to DIN/ISO
102	000	153	H7	±0.01	Ra 1.6-3.2	Actual size in relation to the total dimension and total diameter
255	175	175	ISO fits	±0.01	Ra 1.6-3.2	Actual size and tolerance zone specified in PMI, on a supplementary sheet, etc.
105	105	110	±0.005		Ra 1.6-3.2	Optionally: fitting surfaces, fits, highly precise contours/finishing
255	153	000	±0.01		Ra 1.6-3.2	Fitting surfaces, fits, highly precise contours/finishing
128	128	064	±0.02		Ra 1.6-3.2	O-rings, fits with larger clearance
000	255	000	±0.05		Ra 3.2	Cold runners and couplings, hole for return pin, collar surfaces on ejectors
255	000	255	±0.10		Ra 6.3	Clearance holes, clearance surfaces
000	000	255	±0.20		Ra 6.3	Roughing, clearance surfaces, clearance holes, hydraulic system, cooling circuits, initial bores
255	255	255	±0.20		Ra 6.3	Optionally: air or gas in order to distinguish the cooling circuit holes
192	255	192	±1.00		Flame cut	Flame cut surfaces

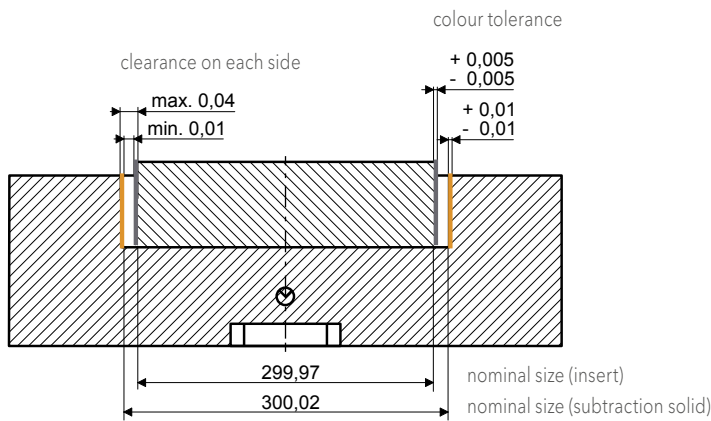
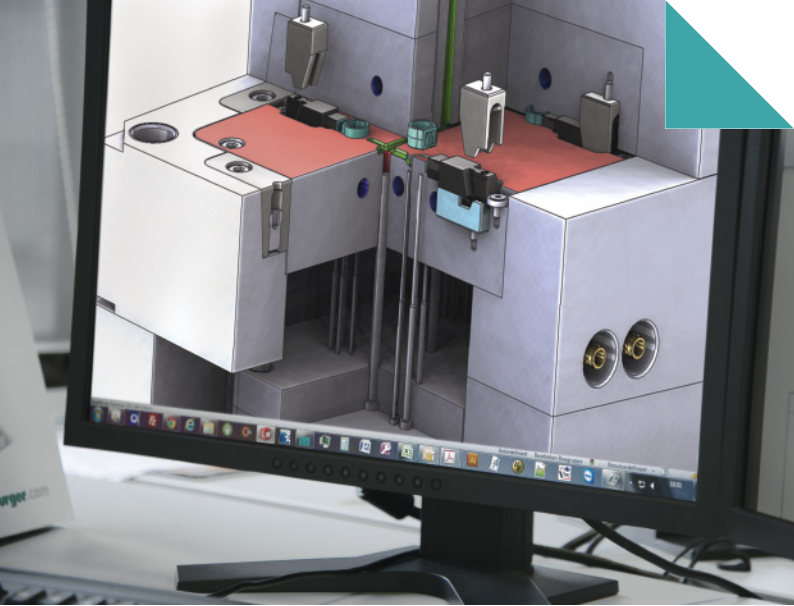
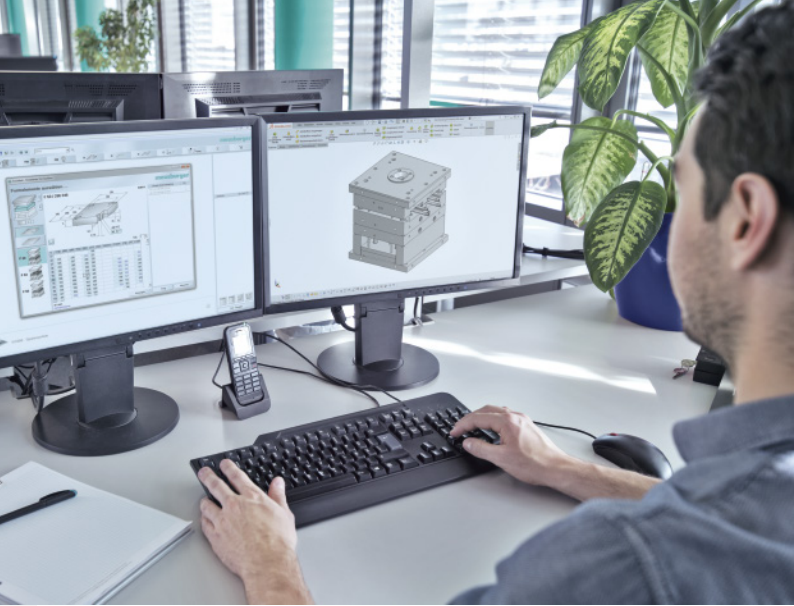
## CONTOURS

RGB COLOUR			TOLERANCE IN MM/OFFSET SURFACE	POSITION TOLERANCE	SURFACE	APPLICATION EXAMPLES/COMMENT
R	G	B				
255	000	000	±0.02		VDI ..*	Assembly surfaces (technical polishing)
153	153	153	±0.02		VDI ..*	Visible surfaces (technical polishing)
255	102	102	±0.02		VDI ..*	Visible surfaces (polishing to mirror)
153	000	000	±0.02		VDI ..*	Visible surfaces (EDM, graining)
255	153	000	±0.01		VDI ..*	Highly precise contours
051	153	051	±0.01		VDI ..*	Visible surfaces

\*VDI ...values will be defined by the customers individually

As of May 2015



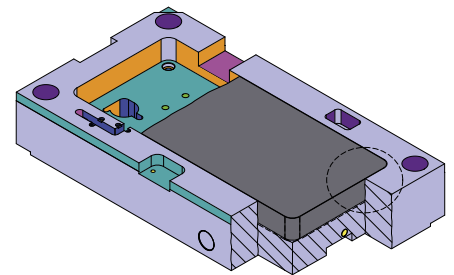


Generally, the nominal size of the subtraction solid defines the assembly clearance.

### Minimum assembly clearance:

$$\begin{aligned} & \text{Subtraction solid nom.size} - 2 \times \text{subtr.solid surface tol.} \\ & - \text{Insert nominal size} + 2 \times \text{insert surface tolerance} \\ \hline & \Sigma \text{ Minimum assembly clearance} \end{aligned}$$

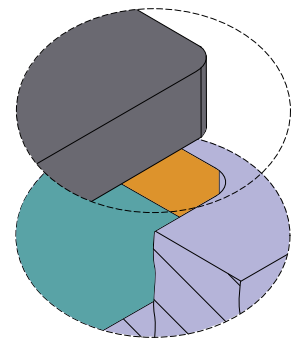
min.  
max.



### Maximum assembly clearance:

$$\begin{aligned} & \text{Subtraction solid nominal size} + 2 \times \text{subtr.solid surface tol.} \\ & - \text{Insert nominal size} - 2 \times \text{insert surface tolerance} \\ \hline & \Sigma \text{ Maximum assembly clearance} \end{aligned}$$

min.  
max.



## MANUFACTURING STANDARDS

As for manufacturing, the cavity plates tend to be produced bigger and the inserts smaller. In the case of diameters, the position tolerance applies to the hole centre. In order to make a clear distinction, the threads must be designed on the diameter of the core according to DIN/ISO. The surfaces on the body for which no attributes have been specified will be machined to tolerance DIN ISO 2768mH. The Meusburger standard complies with the tolerances specified in the relevant Meusburger product information and manufacturing standards.

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