

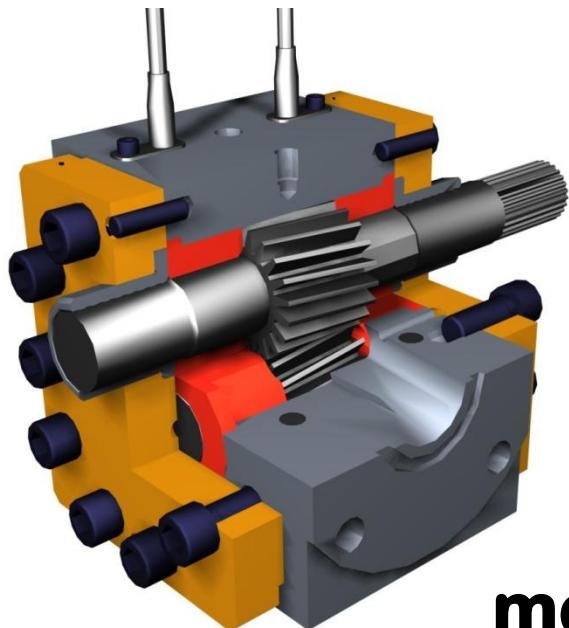


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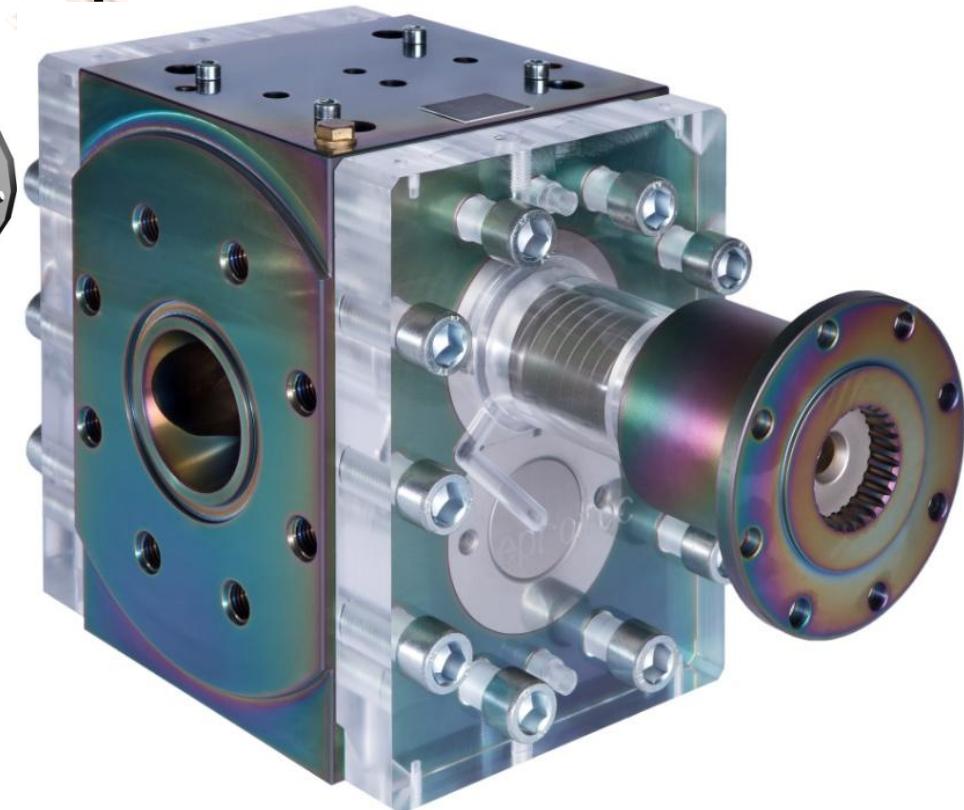
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Welcome to melt pump assisted extrusion



melt-X



eprotec extrusion technology ag
switzerland
ISO 9001

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history

melt pump experience in extrusion and compounding since 1987

eprotec founded 1999 by 4 melt pump experts

**complete new development - no compromise to generations
→continuous development**

speciality development for straining rubber strip w. melt pump

speciality development blendymer® recycling post consumer PO

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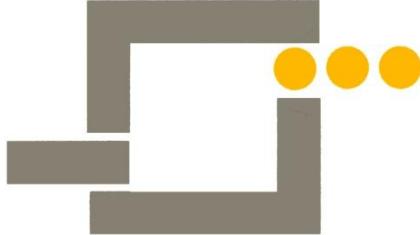


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company high lights

- 35 – 50% glass fiber – Du Pont (BE , CAN)
- diverter with double pump and head (POL)
- fastest 10[min] color change black-white – Pirelli (IT)
- first high speed extrusion – Battenfeld, today SML
- 4,5t/h ABS compounding – BASF (ROK)
- recycling post consumer, double service life – Purus, Vogt (DE)
- up to 80% BaSO₄ +LDPE – Magna Näher (USA)
- 2.6 -3.5t/h Cabel compound Sioplas(LDPE +Silan) (PRC, IND)
- 6,2t/h PVC (LVT) +50-70% limestone – Unilin (BE)



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stands for



tradition



efficiency



precision + quality



availability + on time



durability

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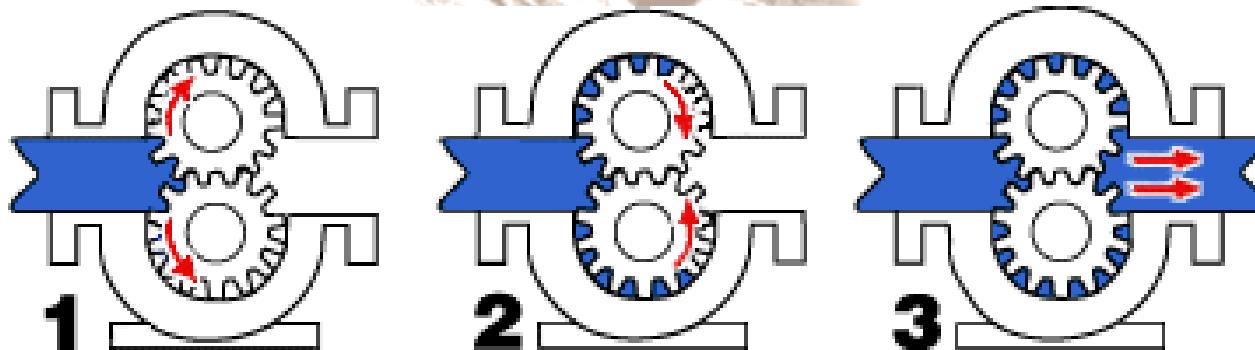


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how does the melt-X work ?



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key components of melt-X

slide bearing grooves matched to the teeth

- no dead zones (gels, black spots, hangups)
- selfcleaning , fast and effective
- lowest friction
- lowest temperature increase
- lowest peak puls pressure

software for melt-X application layout

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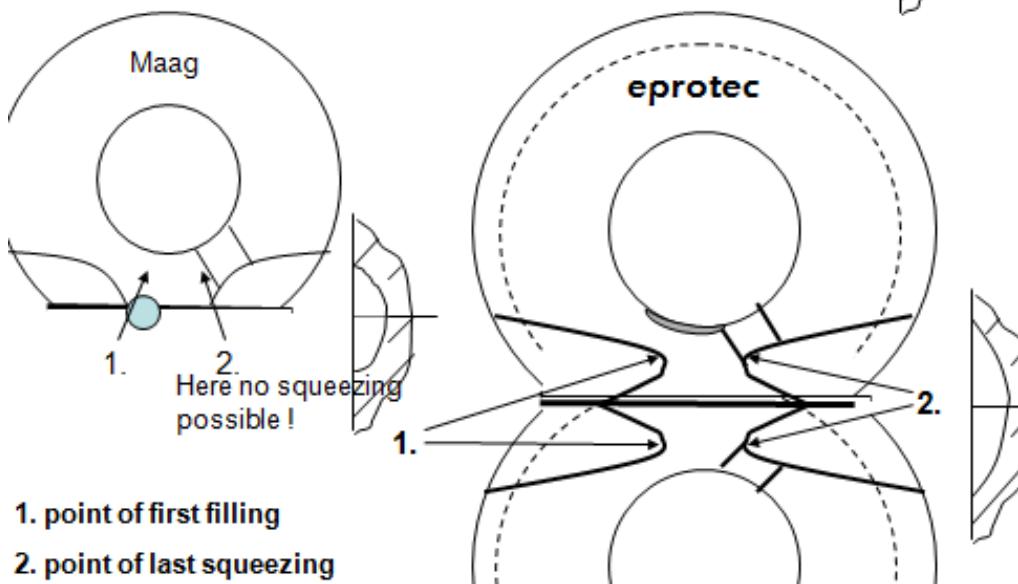
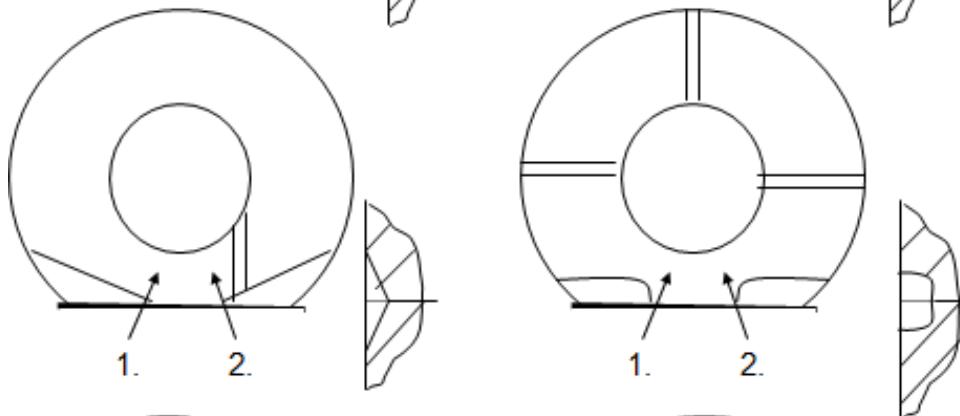
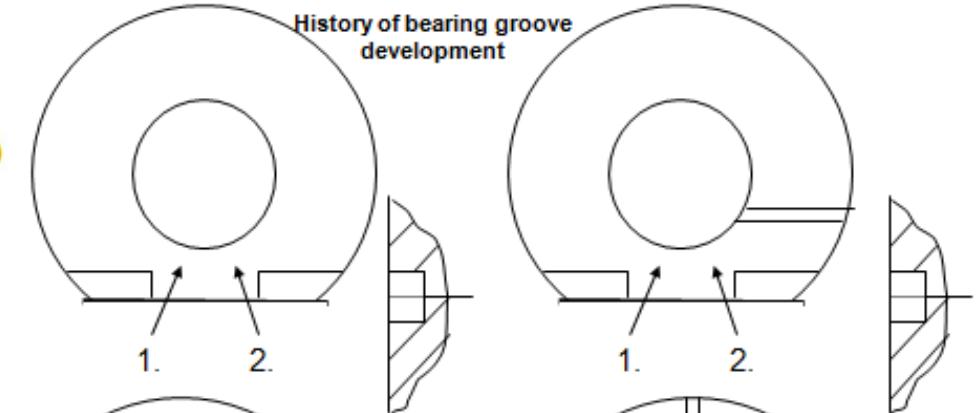
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History of bearing groove development



melt-X

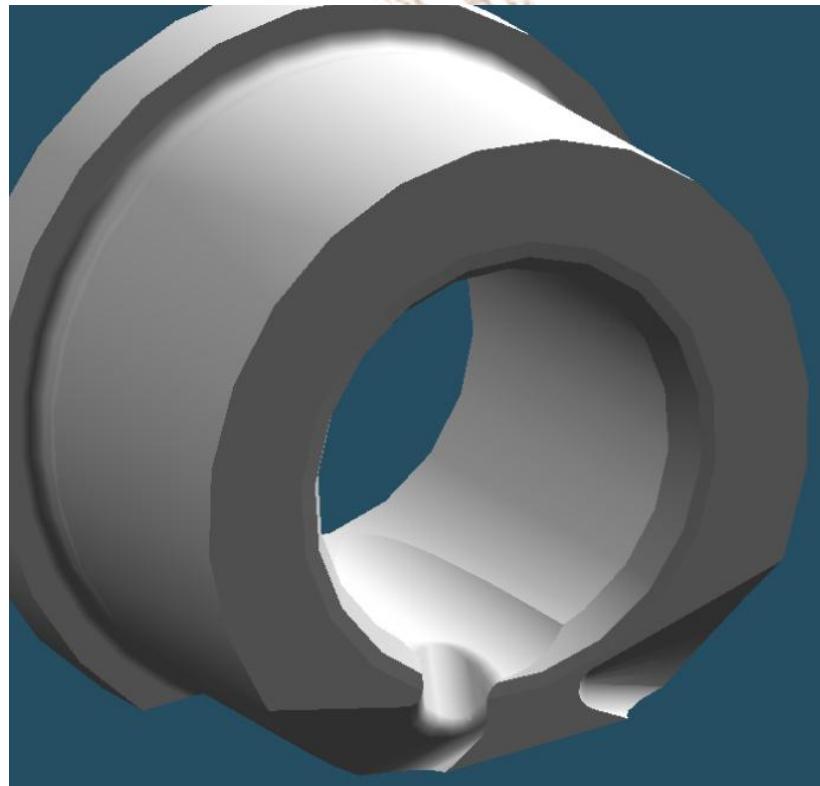


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eprotec melt-X slide bearing



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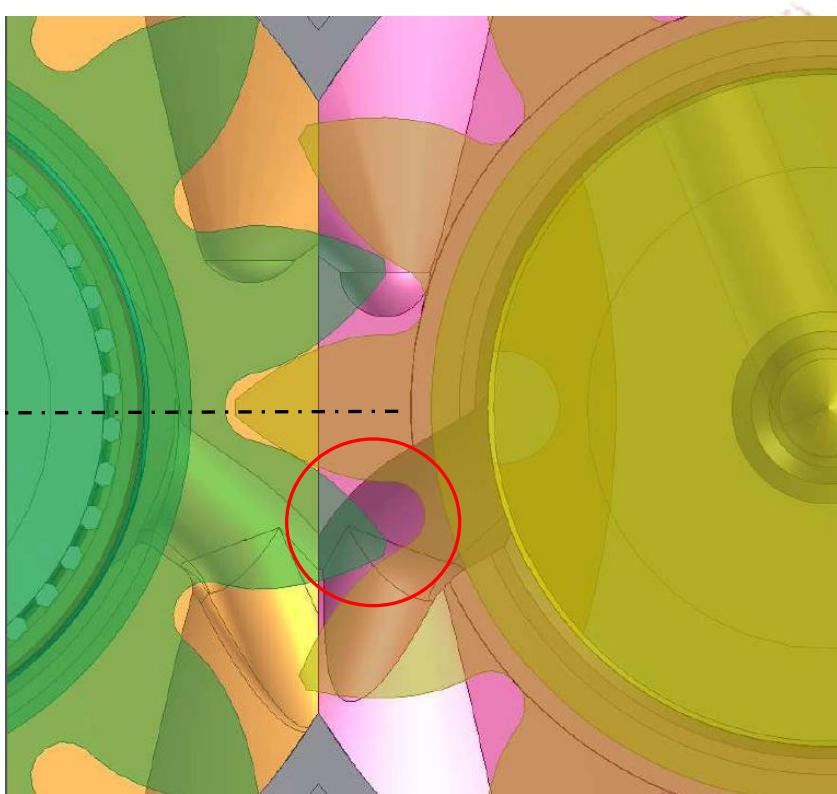


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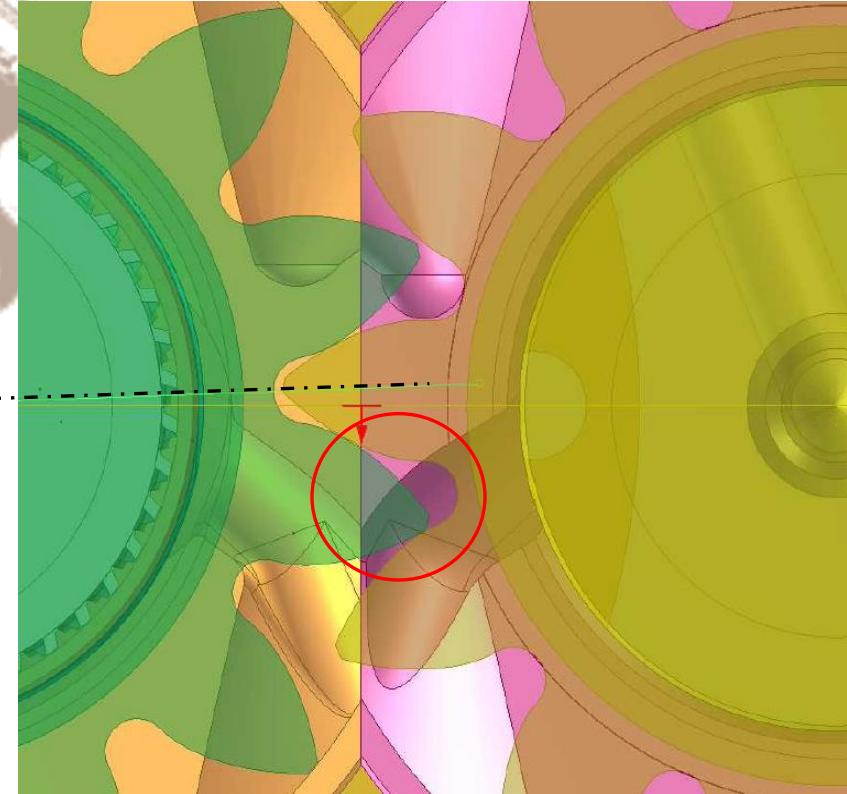
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0°



2°



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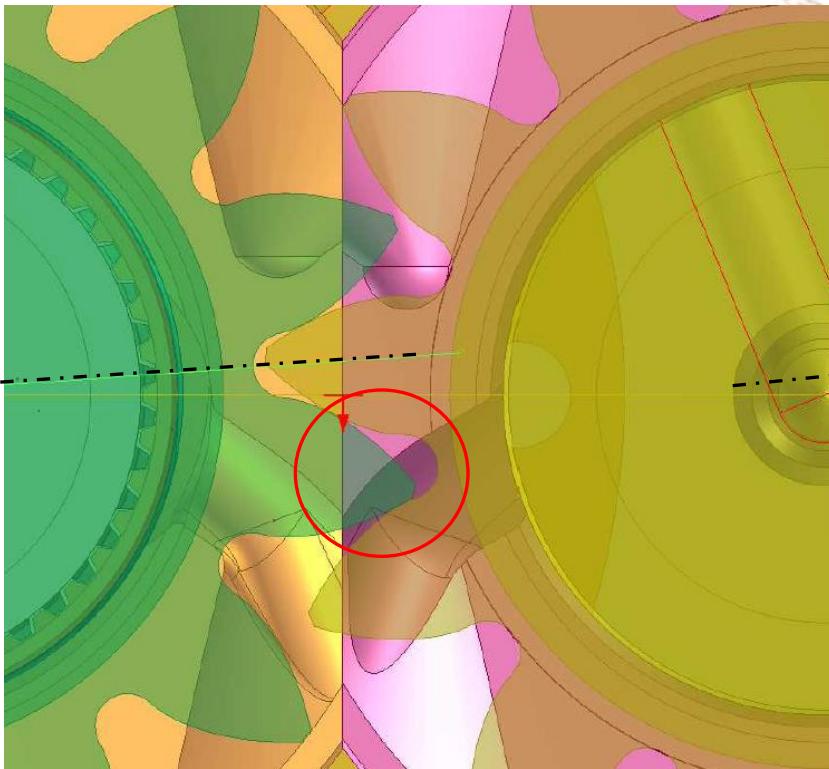


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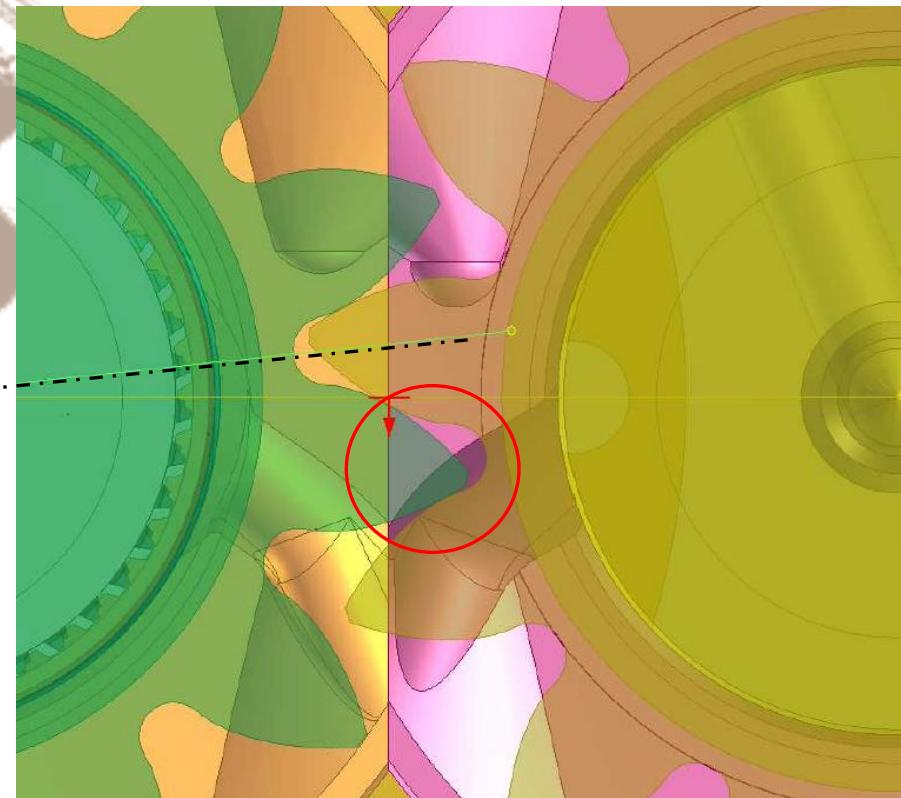
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4°



6°



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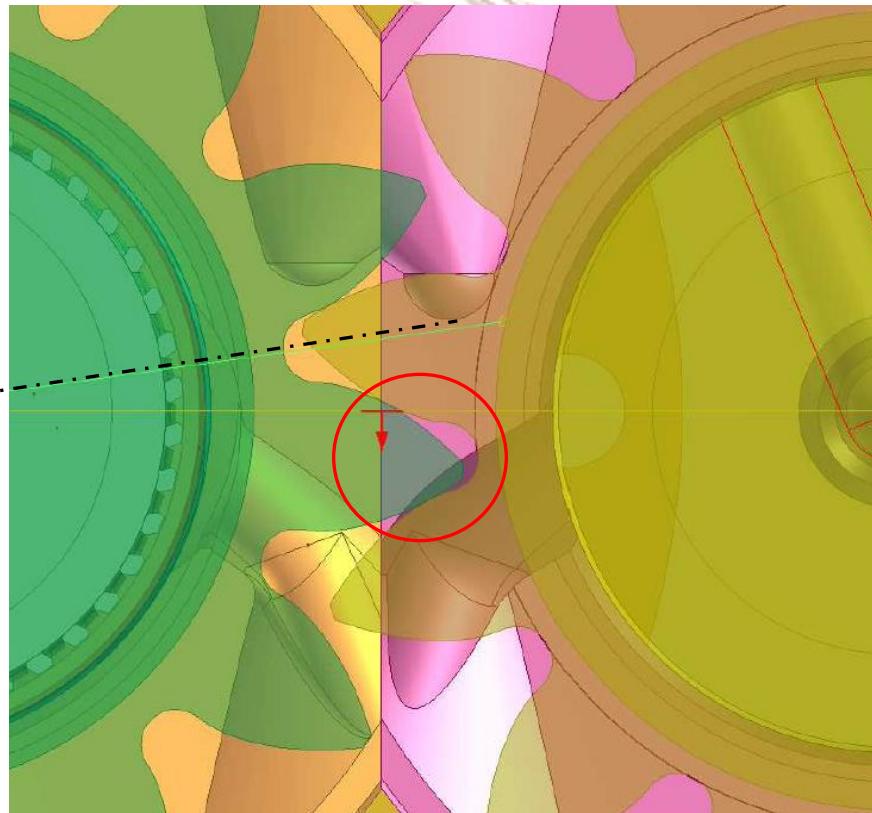


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8°



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shaft sealing / viscoseal



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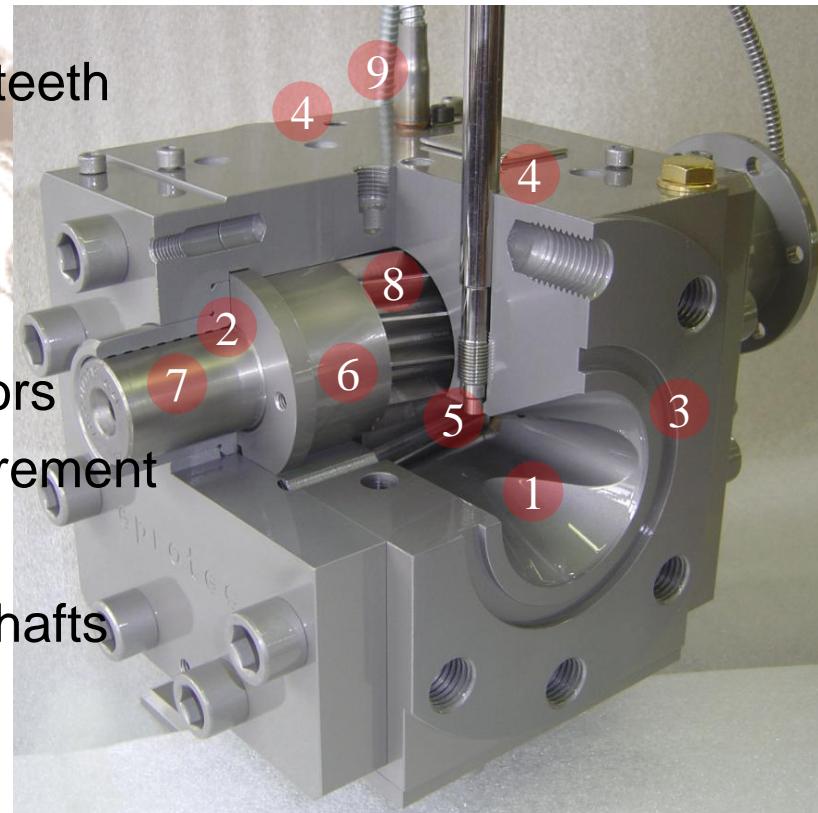
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tech benefits of melt-X

beside matched slide bearing grooves to teeth

- ① flawless melt flow channels
- ② dead zone free
- ③ smaller product bore dimensions
- ④ integrated bores for pressure sensors
- ⑤ accurate place for pressure measurement
- ⑥ tool steel hardened bearings
- ⑦ tool steel hardened+nitrided gear shafts
- ⑧ full nitration depth in gears
- ⑨ zone adjusted heating power





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sheet and film application melt-X developments

- delicate applications bleed/drainage to outside
- no bleed – leak free (cup version , stuffing box)
- delicate automotive applications coated housings
- low temperature profil



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delicate applications bleed/drainage to outside competition



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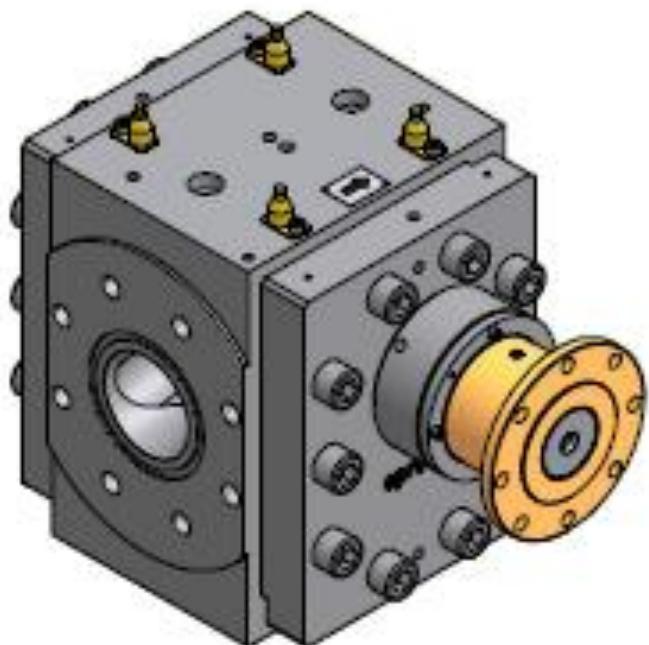
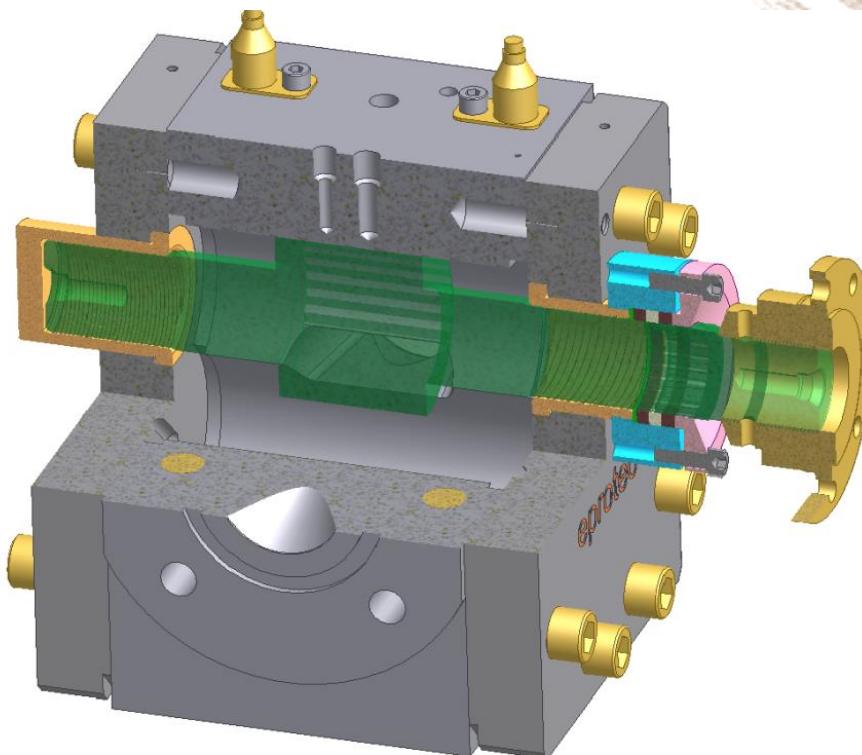


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no bleed – leak free (cup version , stuffing box)



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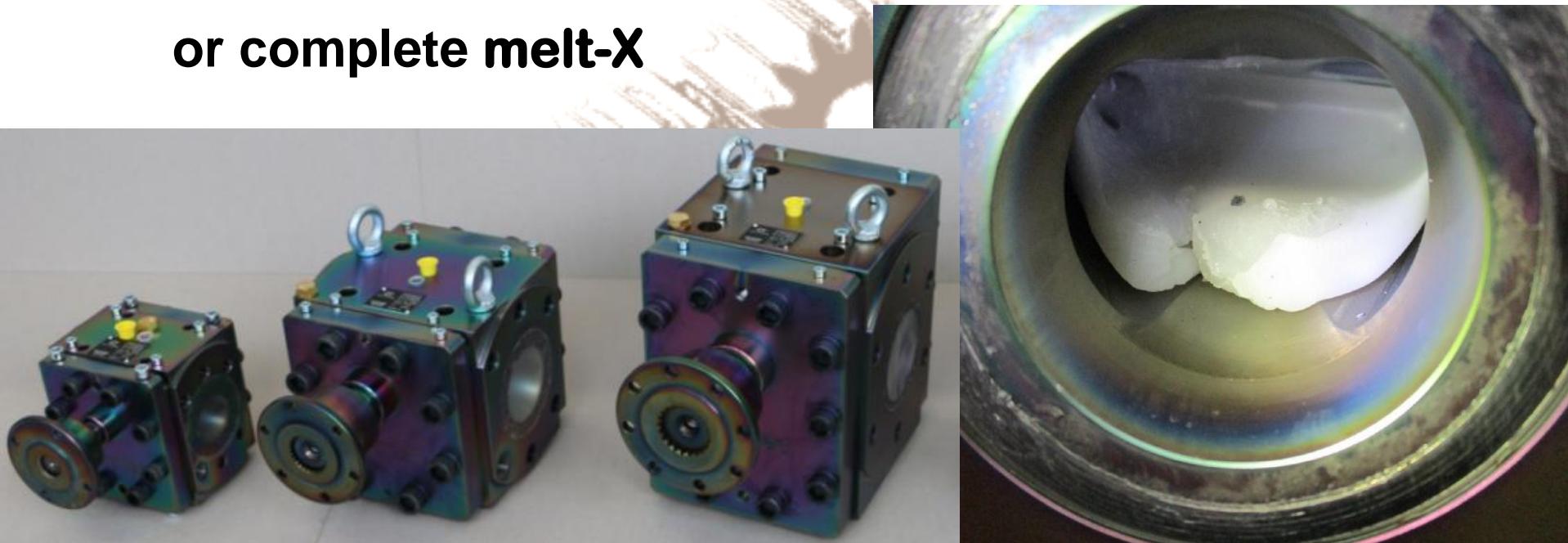


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**delicate automotive applications coated housings
or complete melt-X**



no tools required for cleaning

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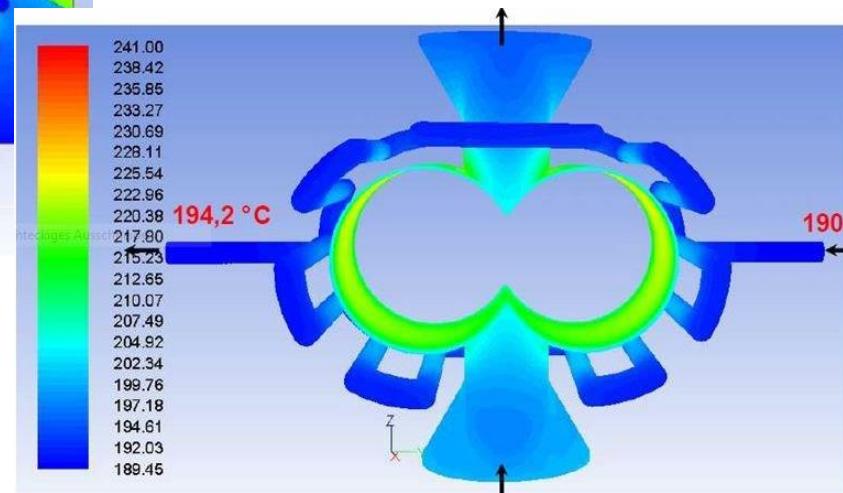
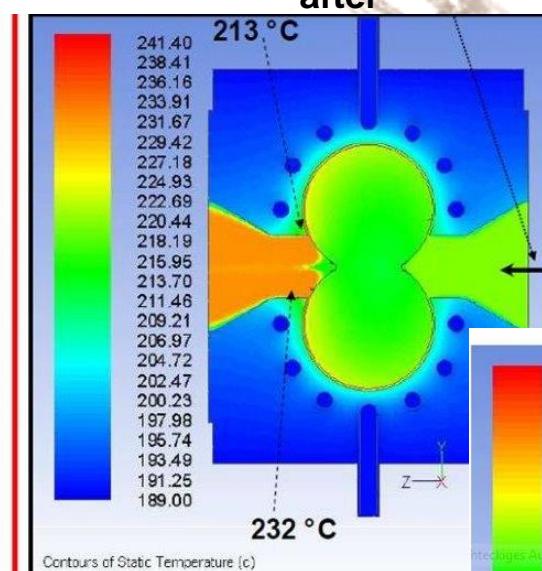
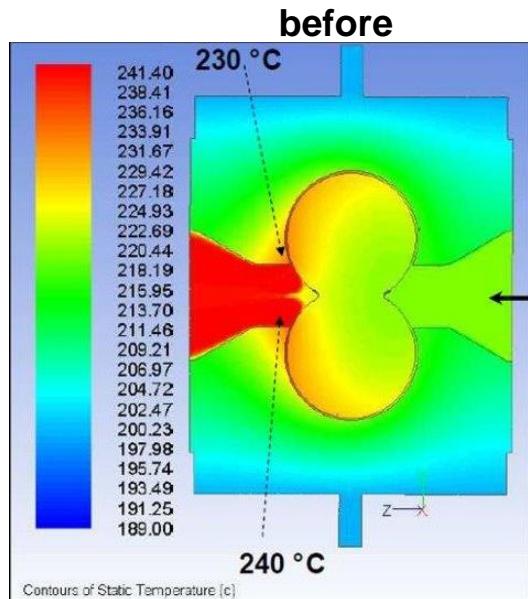


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low temperature



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recent developments melt-X

stiffer displacement curve

f(n_{pu} , viscosity, dp, play, compressibility)

→ results in more exact linear capacity
and higher volumetric efficiency

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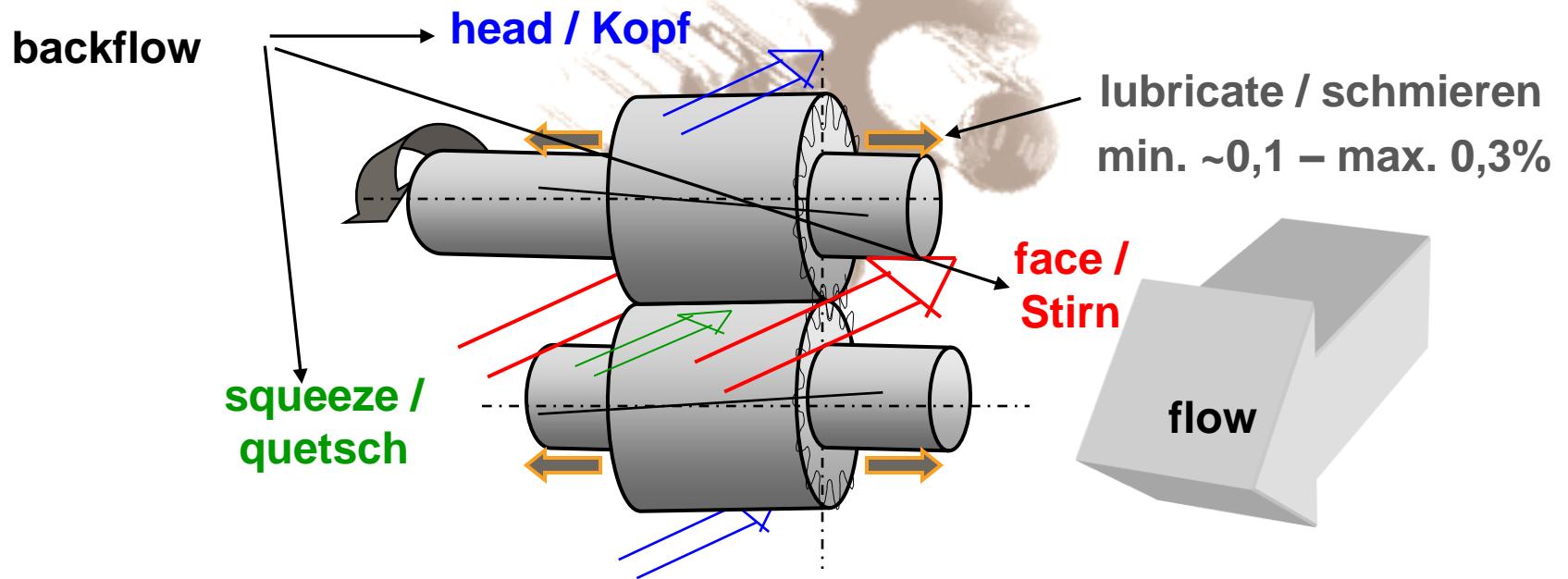


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volumetric efficiency
~ 88 – 98 % => f (n, η, p, play)

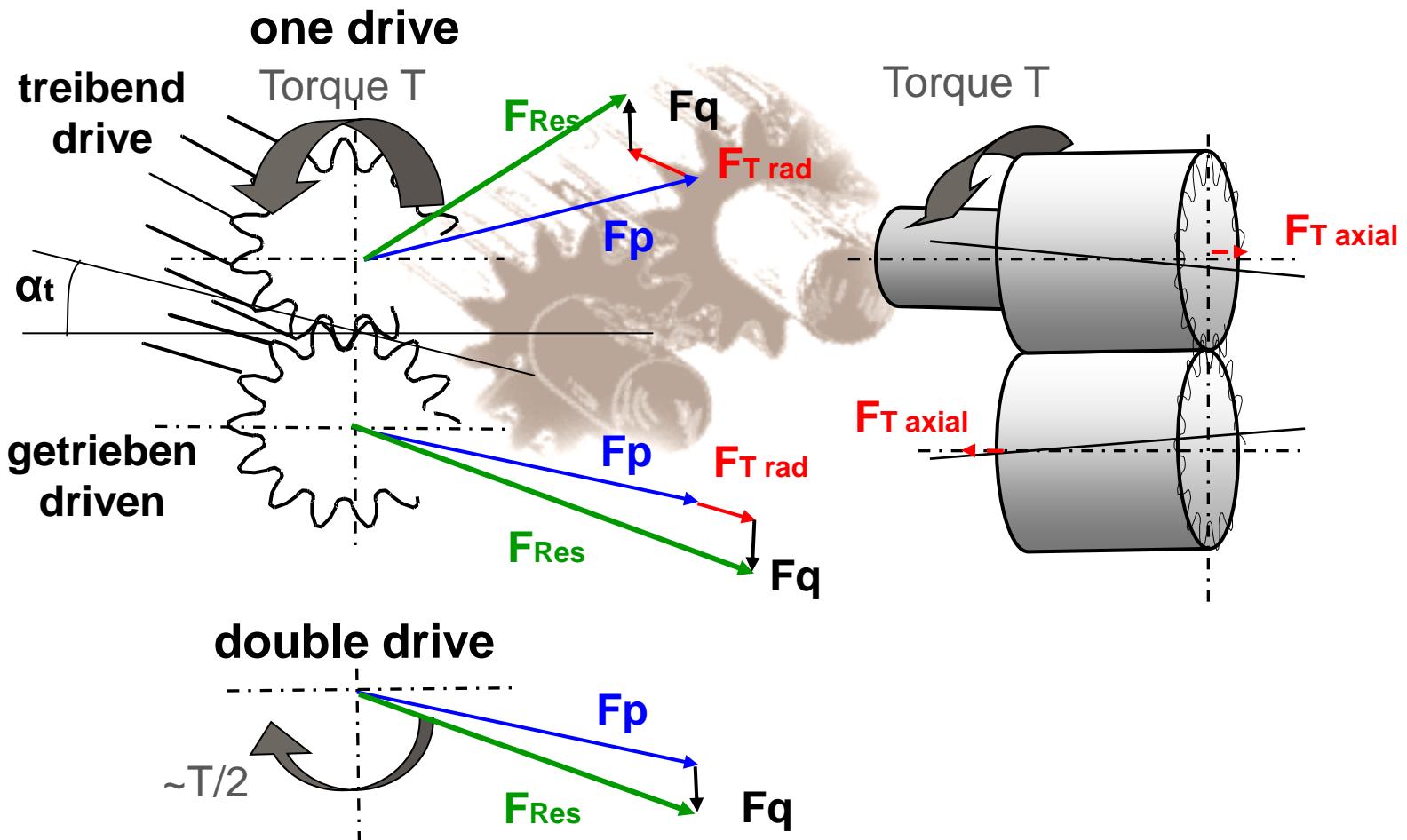




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eprotec soft aspects and philosophy

customer first

broad know how support

short response time

short decision making process

always spare parts on stock

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Starlinger



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Krauss Maffei
Berstorff



P RE PLANO



Al Watania Plastics



H.B. Fuller
Forbo

EVONIK INDUSTRIES | degussa.



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