



SV30 is a pressure-nitrided, martensitic cold work steel which offers superior corrosion-resistance in high performance applications and extreme operating conditions, for example those employing aggressive media such as cleaning chemicals and salt spray.

The material combines hardness levels up to 60 HRC with excellent durability under static and dynamic demands. It's fine, homogeneous structure allows for excellent machinability, e.g. when grinding and honing, and high thermal stability following heat treatment.

A combination of high corrosion and wear resistance, when compared to conventional cold work steels, make it suitable for a wide variety of demanding applications. In particular, SV30's range of characteristics make it the preferred material in the following applications.

### Advantages:

- Significantly longer service life.
- Highest corrosion resistance.
- Improved mechanical properties due to a very fine structure.
- Quieter running characteristics.
- High temperature resistance.
- High chemical resistance.

### Applications:

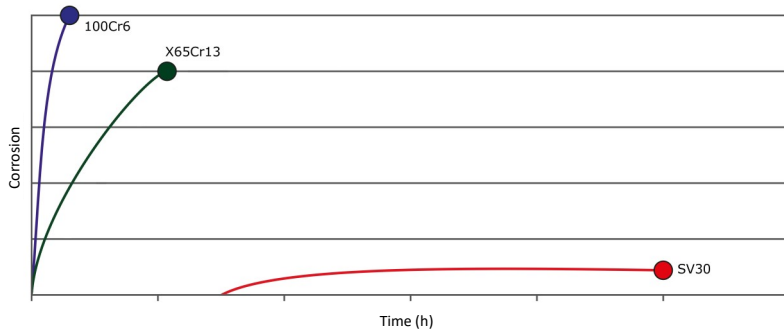
- Medical Engineering.
- Dental Industry.
- Vacuum Technology.
- Aerospace Industry.
- Measurement and Control Technology.
- Food Industry.
- Chemical Industry.
- Machine Tools.



# Technical Data



## Corrosion Resistance



100Cr6  
after 50h



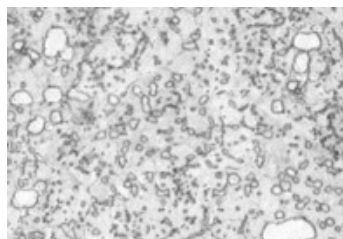
X65Cr13  
after 200h



SV30  
after 1000h



1.4108 (SV30)  
Magnification X1000



1.4037 (X65Cr13)  
Magnification X1000

## Chemical Composition

Chemical Element	Min.	Max.
Carbon (C)	0.25	0.35
Silicon (Si)	-	1.00
Manganese (Mn)	-	1.00
Chromium (Cr)	14.0	16.0
Phosphorus (P)	-	0.030
Sulfur (S)	-	0.025
Nickel (Ni)	-	0.50
Molybdenum (Mo)	0.85	1.10
Nitrogen (N)	0.30	0.50
Iron (Fe)	Rest	Rest