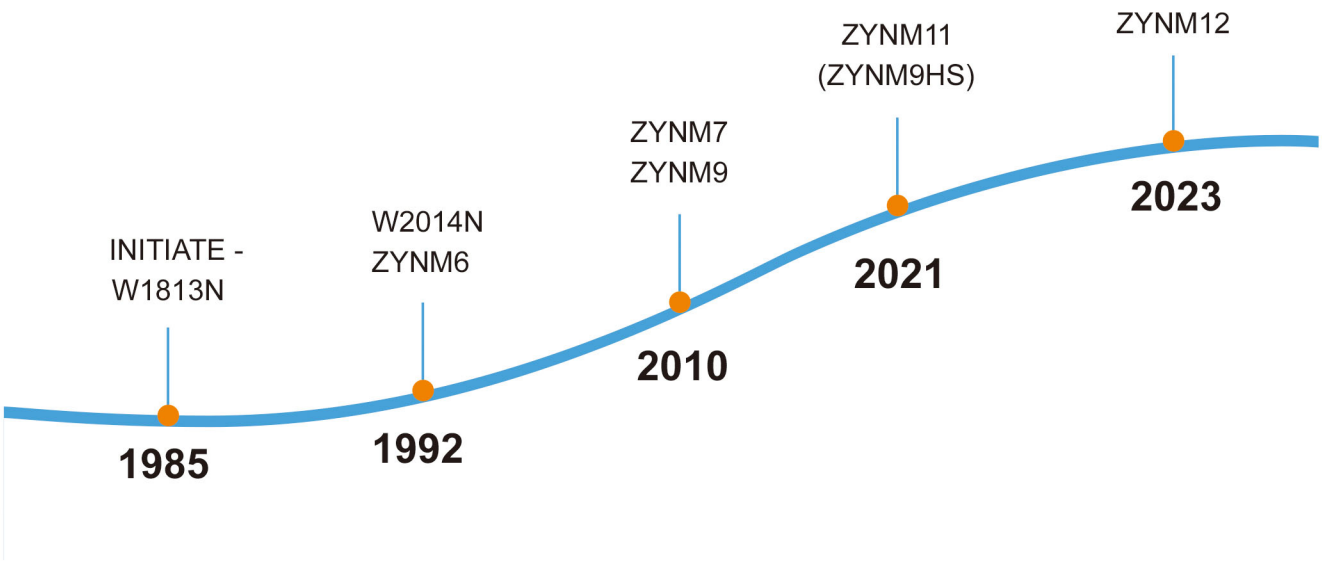
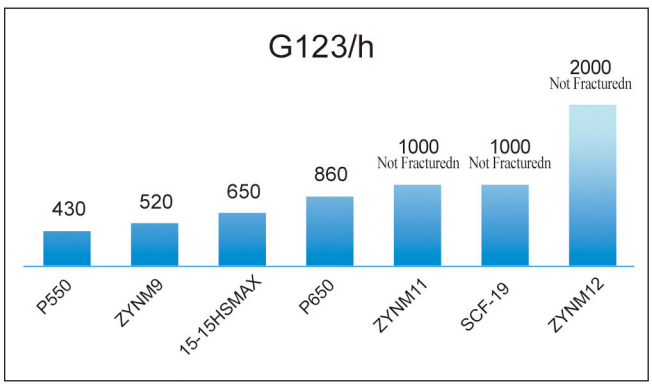
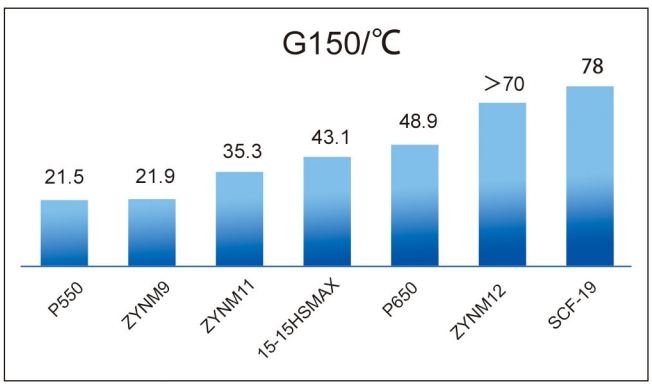
NON-MAGNETIC MATERIALS R&D HISTORY



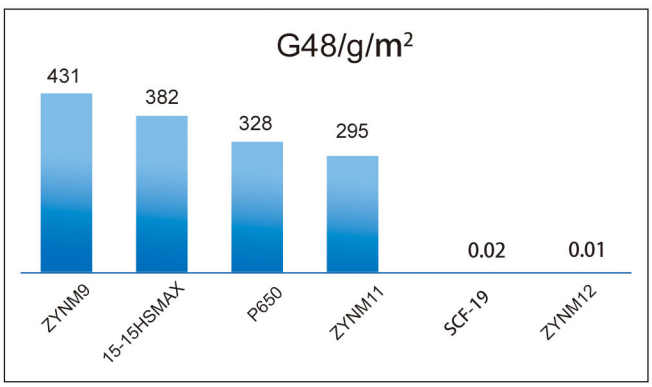
COMPARISON OF CORROSION RESISTANCE





Higher stress corrosion cracking and higher critical pitting temperature indicate superior corrosion resistance of the material.

Lower mass loss indicates superior corrosion resistance of the material.



Tel:+86-135-2334-9279 Email:liangshaofeng@zssw.com Website:www.zsswglobal.com

MECHANICAL PROPERTIES

Material	OD		Rp0.2		Rm		A	Z	AKV	Hardness
	in	mm	ksi	Mpa	ksi	Mpa	%	%	J	HBW
ZYNM7	≤8.0	≤203.2	≥110	≥758	≥120	≥827	≥20	≥50	Avg ≥180 Indv ≥120	285～430
	8.0～11.0	203.2～279.4	≥110	≥689						
ZYNM9 ZYNM11	≤8.0	≤203.2	≥140	≥965	≥150	≥1034	≥20	≥50	Avg ≥150 Indv ≥100	300～460
	8.0～9.4	203.2～238.8	≥130	≥896						
	9.5～11.0	241.3～279.4	≥120	≥827	≥140	≥965				
ZYNM12	≤8.0	≤203.2	≥140	≥965	≥150	≥1034	≥20	≥50	Avg ≥150 Indv ≥100	300～460
	8.0～9.4	203.2～238.8	≥130	≥896						
	9.5～11.0	241.3～279.4	≥120	≥827	≥140	≥965				

- Magnetic Properties
  Magnetic Permeability： 1.005 Max
  Magnetic Field Variation: 40 gammas Max（0.04μT）
- Corrosion Resistance:
  ASTM A 262, Practice ‘A’ & ‘E’
- Ultrasonic Testing :
  API 7-1 clause 12

QUALIFIED SUPPLIER TO:

SCHLUMBERGER | PETROCHINA | WEATHERFORD
CNOOC | ADNOC | SINOPEC | NOV

Tel:+86-135-2334-9279 Email:liangshaofeng@zssw.com Website:www.zsswglobal.com