

# West Special Fasteners Ltd.

### Super Duplex UNS S32760

Super Duplex UNS S32760 has a microstructure of approximately 50% austenite and 50% ferrite and has been designed to cope well in aggressive and harsh environments.

UNS S32760 contains high molybdenum, chromium and nitrogen which help towards the outstanding resistance to pitting and crevice corrosion in seawater as well as other chloride containing environments, and excellent resistance to SCC (stress corrosion cracking).

Super Duplex UNS S32760 provides higher strength than both austenitic and 22% Cr Duplex and is suitable in a variety of applications and industries, such as Chemical Plants, oil & gas pipelines and rigs, power generation and marine environments.

Use of UNS S32760 products in industry would include heat exchangers, pressure vessels, deep sea risers, flue gas desulfurization equipment, swimming pools (good SCC resistance), Subsea Cable Laying, Wind Turbines, Wave Power Generation, Subsea tidal turbines, Cable Protection, Flanges, Pumps & Valves and pulp & paper.

## Super Duplex UNS S32760 Grades & Equivalents:

- Werkstoff 1.4501
- S32760 SA
- S32760 FLT
- S32760 FG
- Astm A276 S32760 Condition A
- Astm A276 S32760 Condition S
- Norsok MDS D57, D59, D60\*
- Zeron 100 SA®
- Zeron 100 FLT ®
- Astm A182 F55
- X2CrNiMoCuWN25.7.4

Typical Chemical Analysis

| Si        | Mn   | P  | S   | Cr   | Ni   | Мо  |
|-----------|--|--|---|--|--|---|
| 1.000     | 1.000                                      | 0.030  | 0.010   | 24.0-26.0  | 6.00-8.00  | 3.00-4.00   |
| $N^2$     | Nb   | Ti   | Со  | Cu   | Al   | В   |
| 0.20-0.30 |  |  |   | 0.50-1.00  |  |   |
| Fe        | Mg   | Та   | Nb + Ta   | Ca   | $O_2$  | Bi  |
| Sn        | Zn   | Pb   |   |  |  |   |
|           | 1.000<br>N <sup>2</sup><br>0.20–0.30<br>Fe | 1.000 1.000<br>N <sup>2</sup> Nb<br>0.20-0.30<br>Fe Mg | 1.000     1.000     0.030       N²     Nb     Ti       0.20-0.30     Ta | 1.000       1.000       0.030       0.010         N²       Nb       Ti       Co         0.20-0.30       Ta       Nb + Ta | 1.000         1.000         0.030         0.010         24.0-26.0           N²         Nb         Ti         Co         Cu           0.20-0.30         0.50-1.00         0.50-1.00           Fe         Mg         Ta         Nb + Ta         Ca | 1.000         1.000         0.030         0.010         24.0-26.0         6.00-8.00           N²         Nb         Ti         Co         Cu         Al           0.20-0.30         0.50-1.00         0.50-1.00         Ca         O2 |

#### Typical Mechanical Properties in condition A

| Tensile Strength  | 750 N/MM <sup>2</sup> min |  |  |  |
|-------------------|---------------------------|--|--|--|
| 0.2% Proof Stress | 550 N/MM <sup>2</sup> min |  |  |  |
| Elongation        | 25% min                   |  |  |  |
| Reduction of Area | 45% min                   |  |  |  |
| Hardness          | 290HB max                 |  |  |  |
| Impacts           | , ,                       |  |  |  |
| Stress Rupture    |                           |  |  |  |
| Other Remarks     | //////                    |  |  |  |

### **Product Forms Available:**

- Hexagon Head Bolts
- Hexagon Nuts
- Studbolts
- Socket Capscrews
- Socket Countersunk Screws
- Socket Setscrews
- & Many other special fasteners and bespoke machined parts

Products can be produced to customer drawings or relevant British (BS), American (ASME, ANSI), European (DIN, UNI) or International Standards (ISO).

The size ranges M3 to M120 Metric and 3/16" to 4.75" Imperial can be supplied. Thread forms include UNC, UNS, UNF, BSW, BSF, Whitworth, Metric, Metric Fine.

\*West Special Fasteners are Norsok and Exxonmobil approved





Callywhite Lane

Dronfield

S18 2XR

Derbyshire

T: +44 (0)1246 291111

F: +44 (0)1246 291177

www.westspecialfasteners.co.uk sales@westspecialfasteners.co.uk