

## Hardfacing cored wire

### Classification

DIN 8555-83 :MF1-GF-350-GPS

### General description

Hard-Revishield®350-GPS is a self shielded, open arc, flux cored tubular electrode designed primarily for the build-up of steel parts or as a buttering layer prior to hardfacing. Arc characteristics are excellent producing a soft low penetration arc (ideal for build-up) that exhibits low spatter levels and excellent slag removal. Although, Hard-Revishield®350-GPS is primarily designed for the open arc operation, it may be used under a neutral flux for conditions requiring spatter elimination and removal of arc glare

### Application

Hard-Revishield®350-GPS-produces a crack-free wear resistant deposit with a hardness range of 25-35 HRc depending on material dilution and number of layers. Designed primarily as a final overlay on steel parts which need to be machined or as a build-up layer of other hardfacing materials. It is particularly suitable of conditions of moderate abrasion and friction, coupled with resistance to impact such as applications involving rolling, sliding and metal to metal wear.

### Typical applications

#### BUILD-UP:

Shovel and bucket lips  
 Pump impellers and housings  
 Dredge and shovel bucket teeth  
 Mill and crushing hammers

#### HARDFACING:

Crane and mine car wheels  
 Tractor rolls, idlers, links and sprockets  
 Cable drums  
 Shafts  
 Roller guides



### Mechanical properties, all weld metal

#### Typical hardness values

Layer 1	21-30 HRc (230-290HB)
Layer 2	26-32 HRc (260-300HB)
Layer 3	25-35 HRc (250-330HB)
Welded on Mild Steel Plate (12mm)	

### Packaging, available sizes and identification

Unit type	Net weight/unit (kg)	Diameter (mm)			
		1.1	1.6	2.0	2.8
Spool 14C	6.35			X	
Spool 22RR	10	X	X	X	
Spool 50C	22.8			X	X

Identification Imprint: Hard-Revishield®350-GPS

Hard-Revishield®350-GPS: rev. EN 20

# Hard-Revishield®350-GPS

## Additional information

All work-hardened base material should be removed prior to applying Hard-Revishield®350-GPS to prevent embrittlement and cracking.

Preheat and postweld heat treatment is not generally necessary on C/Mn steels, however, preheat up to 260°C may be necessary on high carbon steels or large complex or restrained components.

The weld metal can be machined to exact dimensions using high speed or carbide cutting tools.

There is no limit to the deposit build-up with this wire.

## Welding positions



ISO/ASME PA/1G

## Current type

DC +

## Chemical composition (w%) typical, all weld metal

C	Mn	Si	Cr	Al
0.14	2.2	0.55	1.3	1.8

## Structure

In the as welded condition the microstructure consists mainly of a mixture of ferrite and bainite

## Calculation Data

Diameter mm	Wire Feed Speed (cm/mm)	Current (A)	Arc Voltage (B)	Deposition Rate (kg/h)	Efficiency (%)
1.1	5.1 to 12.7	80-150	25-31	1.5-3.9	80-85
1.6	3.8 to 8.9	125-225	26-32	2.1-5.0	79-84
2.0	3.2 to 6.4	200-325	23-29	3.1-6.1	87-86

## Complementary products

Complementary products include Elehard® 350-GP.