

## Exaton Ni71

Exaton Ni71 is a covered electrode with basic coating and a normal metal recovery for welding of NiCrFe alloys such as Alloy 600, 800 and 800H. 9%Ni steels as well as nickel-alloyed steels for cryogenic temperature use. It is also used for dissimilar joints such as stainless steel and NiCu alloys to carbon steel and nickel alloys. Exaton Ni71 is characterised by little spatter and very good slag removal. Typical applications are found in constructions to be used at lower temperatures e. g. 3.5%, 5% and 9% Ni steels are used as well as austenitic Cr-Ni stainless steel, especially if the weld metal is to be thermoformed or stress relieved. The alloy can be used in air up to 1200°C (2150°F), in sulphur dioxide atmospheres up to 800°C (1470°F) and in ammonia at the highest process temperature. This alloy is used for surfacing or joining where there are strict requirements on stress corrosion resistance and for high temperature service. The microstructure is fully austenitic.

### Especificaciones

|                        |   |
|------------------------|---|
| <b>Clasificaciones</b> | SFA/AWS A5.11 : ENiCrFe-3<br>EN ISO 14172 : E Ni 6182 (NiCr15Fe6Mn) |
| <b>Aprobaciones</b>    | CE  |

Las aprobaciones se basan en la ubicación de la fábrica. Póngase en contacto con ESAB para obtener más información.

|                               |                   |
|-------------------------------|-------------------|
| <b>Corriente de soldadura</b> | DC+               |
| <b>Tipo de aleación</b>       | Ni based Cr alloy |
| <b>Tipo de recubrimiento</b>  | Basic             |

### Propiedades tensoras típicas

| Condición                 | Límite de elasticidad | Resistencia a la tracción | Alargamiento |
|---------------------------|-----------------------|---------------------------|--------------|
| <b>AWS</b>                |                       |                           |              |
| PWHT<br>16 hour(s) 610 °C | 400 MPa               | 635 MPa                   | 50 %         |

### Propiedades de Ensayo de impacto Charpy

| Condición  | Temperatura de ensayo | Valor de impacto |
|------------|-----------------------|------------------|
| <b>AWS</b> |                       |                  |
| PWHT       | -196 °C               | 60 J             |
| PWHT       | 20 °C                 | 100 J            |

### % Análisis metal depositado (valores típicos)

| C      | Mn  | Si  | S       | P       | Ni | Cr | Mo    | Al    | Cu |
|--------|-----|-----|---------|---------|----|----|-------|-------|----|
| <=0.03 | 5.7 | 0.3 | <=0.010 | <=0.015 | 67 | 16 | 0.005 | 0.009 | 0  |

### % Análisis metal depositado (valores típicos)

| Nb  | Ti   | Others tot | Fe   |
|-----|------|------------|------|
| 2.2 | 0.08 | <0.50      | <=10 |

### Datos aportación

| Diámetro       | Amperios | Rendimiento (%) | Tiempo de fusión por electrodo al 90 % I máx. | Tasa de deposición al 90 % I máx. |
|----------------|----------|-----------------|---|-----------------------------------|
| 2.5 x 300.0 mm | 50-70 A  | 0.65 %          | 58 sec  | 0.7 kg/h                          |
| 3.2 x 350.0 mm | 65-105 A | 0.61 %          | 68 sec  | 1.14 kg/h                         |
| 4.0 x 350.0 mm | 75-150 A |                 |   | 0.0 kg/h                          |