

# CERTIFICADO PATRON DE CND

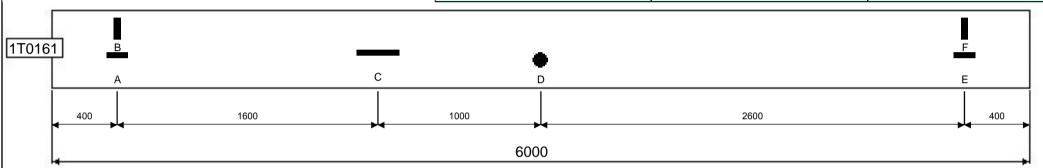
**TEND** 

NDT Reference Standard Certificate

Tubo patrón número Reference standard #

1T0161

| Datos del Producto Product Information |       |                                       |                    |                                   |       |  |  |  |  |
|--|-------|---------------------------------------|--------------------|-----------------------------------|-------|--|--|--|--|
| Diametro [mm]                          | 114,3 | Cliente<br>Client                     | PETROBRAS<br>ENRGI | Ciclo<br>Product                  | 80294 |  |  |  |  |
| Espesor [mm]<br>Wall Thickness         | 6,35  | Tratamiento Termico<br>Heat Treatment | SI                 | Colada<br><sub>Heat</sub>         | 30168 |  |  |  |  |
| Trazabilidad<br>Traceability           | 0     |                                       |                    | Expediente<br>Manufacturing Order |       |  |  |  |  |



Valores Pedidos / Requested Values

Valores Medidos / Measured Values

| Posicion<br>Position | Tipo de Notch<br>Notch Type          | Ancho / Diam<br>Max [mm]<br>Max Width / Diam | Profundidad<br>Nominal [%]<br>Depth | Tolerancia<br>[%]<br>Tolerance | Profundidad<br>Maxima [mm]<br>Max Depth | Profundidad<br>Minima [mm]<br>Min Depth | Profundidad<br>Nominal [mm]<br>Nom Depth | Longitud<br>Maxima<br>[mm]<br>Max Length | Longitud<br>[mm]<br>Length | Profundida<br>d A [mm]<br>Depth A | Profundida<br>d B [mm]<br>Depth B | Ancho / Diam<br>[mm]<br>Width / Diam | Responsable<br>Responsible | Fecha<br>Date |
|----------------------|--------------------------------------|--|-------------------------------------|--------------------------------|---|---|--|--|----------------------------|-----------------------------------|-----------------------------------|--------------------------------------|----------------------------|---------------|
| Α                    | Longitudinal Externo longitudinal OD | 1,00   | 10                                  | ±15                            | 0,730                                   | 0,540                                   | 0,635                                    | 50,80                                    | 47,50                      | 0,685                             | 0,674                             | 0,85                                 | Dante Antunez              | 06/09/13      |
| В                    | Transversal Externo Transverse OD    | 1,00   | 10                                  | ±15                            | 0,730                                   | 0,540                                   | 0,635                                    | 50,80                                    | 45,00                      | 0,700                             | 0,715                             | 0,96                                 | Dante Antunez              | 06/09/13      |
| С                    | Long. de ecualización                | -  | 13                                  | ±15                            | 0,913                                   | 0,675                                   | 0,794                                    | 150,00                                   | 150,00                     | 0,884                             | 0,909                             | -                                    | Pablo Mazzeo               | 06/09/13      |
| D                    | Circular de ecualización<br>Externo  | 1,00   | 10                                  | ±15                            | 0,730                                   | 0,540                                   | 0,635                                    | -  | -                          | 0,630                             | 0,640                             | 0,99                                 | Sebastian Monteros         | 07/11/13      |
| Е                    | Longitudinal Externo longitudinal OD | 1,00   | 10                                  | ±15                            | 0,730                                   | 0,540                                   | 0,635                                    | 50,80                                    | 47,60                      | 0,685                             | 0,697                             | 0,87                                 | Dante Antunez              | 06/09/13      |
| F                    | Transversal Externo Transverse OD    | 1,00   | 10                                  | ±15                            | 0,730                                   | 0,540                                   | 0,635                                    | 50,80                                    | 44,40                      | 0,715                             | 0,696                             | 0,96                                 | Dante Antunez              | 06/09/13      |

## Notas:

- 1.-Todas las dimensiones son en milimetros excepto que se indique lo contrario.
- 2.-Minima Profundidad Nominal de las ranuras 0.3 mm.

CERTIFICADO CON REPLICA SI

## Notes:

- 1.-All dimensions in milimeters unless stated.
- 2.-Minimum notch nominal depth 0.3 mm.
- CERTIFIED WITH PLASTIC REPLICA YES

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Fecha

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Instrumentos de Medicion Utilizados:

Proyector de Perfiles Mitutoyo PJ-A3000 Codigo: 302-711A

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