

CERTIFICADO DE CALIDAD DE PRODUCTO TERMINADO

DAOS GENERALES:

FECHA/HORA: 01/01/16 11:05:34
 CLIENTE: ACEROS TEPOTZOTLAN, S.A. DE C.
 PEDIDO: 020449 CONTRA 8574 REMISION: 0092330-2
 PRODUCTO: REDONDO 7/8" 2X.21MM GRADO DE ACERO A529/A529M-05 G50
 CANTIDAD EMBARCADA 31.734 TONS
 ESPECIFICACION PRODUCTO: A29/A29M-05 EMBARQUE: ACERO TRANSPORTE
 PESO TEORICO PRODUCTO: 3.045 KGS/MT LONGITUD (mts) 11.20 TERMINADO:

ANALISIS QUIMICOS:

| COLADA | % P | % S | % Sn | % C | % Cu | % Mn | % Si | % Ni | % Cr | % V | % Mo | % Ti | % Nb |
|--------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|-------|
| 317690 | .0150 | .0200 | .0310 | .1700 | .2400 | .0150 | .010 | .080 | .120 | .001 | .030 | .003 | .0010 |
| 317692 | .0140 | .0170 | .0360 | .1900 | .2000 | .0120 | .040 | .070 | .120 | .001 | .030 | .002 | .0010 |

ANALISIS MECANICOS Y FISICOS:

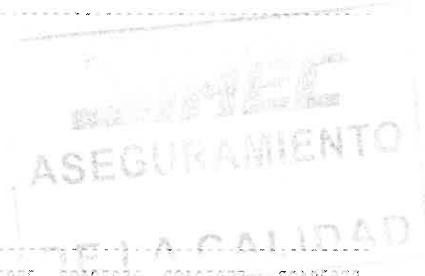
| COLADA | LIMITE ELASTICO (LB/IN2) | ESFUERZO MAXIMO (LB/IN2) | ALARGAMIENTO (%) | DUREZA SUPERFICIAL |
|--------|--------------------------|--------------------------|------------------|--------------------|
| 317690 | 34,448 | 76,222 | 28 | |
| 317692 | 34,240 | 76,350 | 28 | |

ANALISIS METALOGRAFICO:

| COLADA | ESTRUCTURA | INCLUSIONES | TAMAÑO DE GRANO | DESCARBURIZACION |
|--------|------------|-------------|-----------------|------------------|
| 317690 | | | | |
| 317692 | | | | |

ADANOS DE LA COLADA

| COLADA | | | | | | | | | |
|--------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 317690 | SQA05969 | SQA05970 | SQA05971 | SQA05972 | SQA05973 | SQA05974 | SQA05975 | SQA05976 | SQA05977 |
| 317690 | SQA05978 | SQA05980 | | | | | | | |
| 317692 | SQA05981 | SQA05982 | SQA05983 | SQA05984 | | | | | |



028808

[Signature]
 ASEGURAMIENTO DE CALIDAD