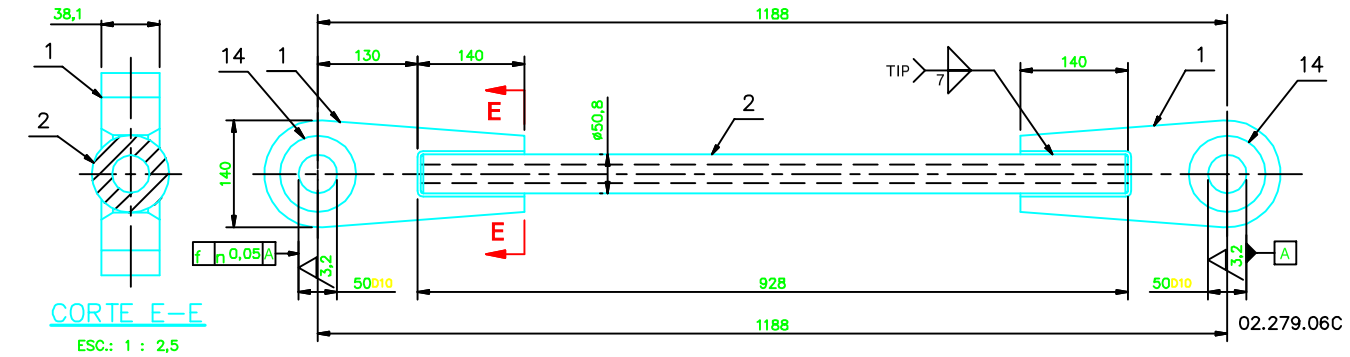

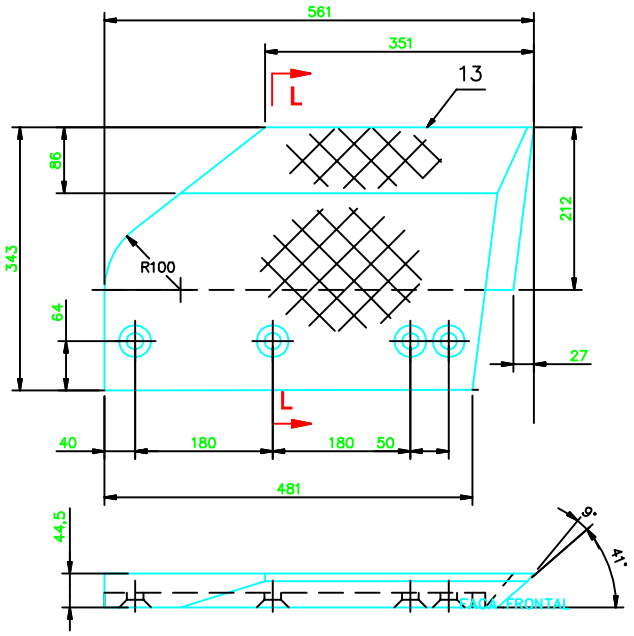

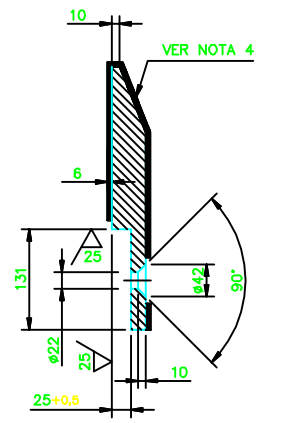

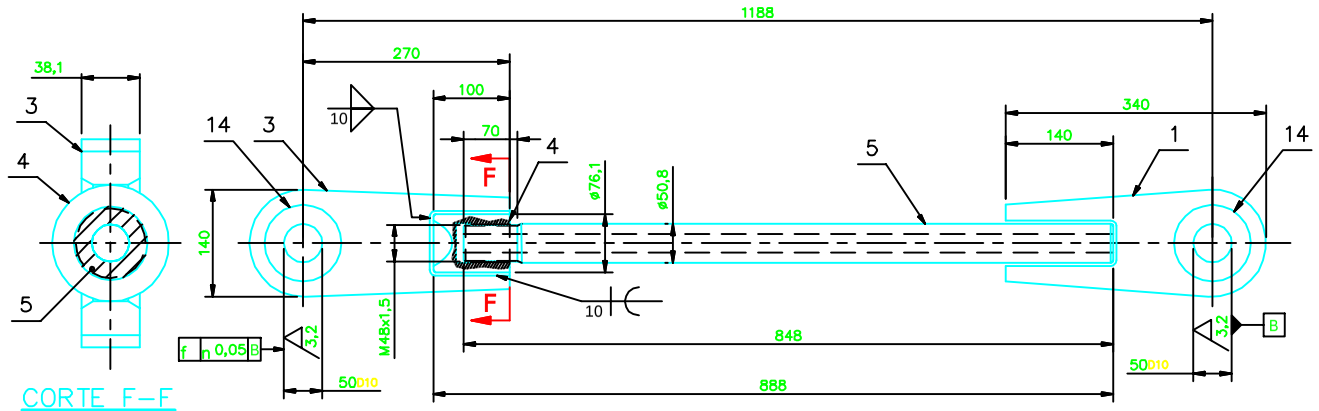

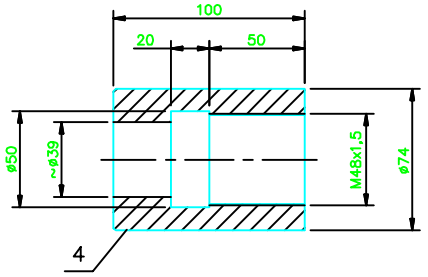

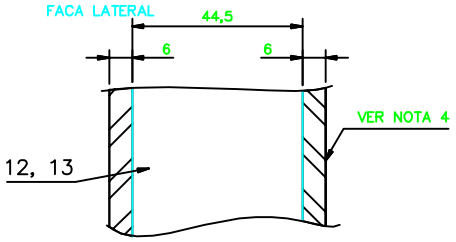

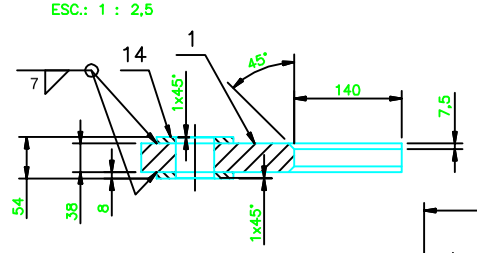

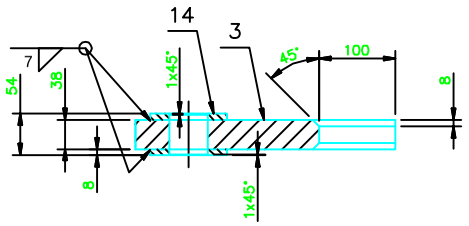

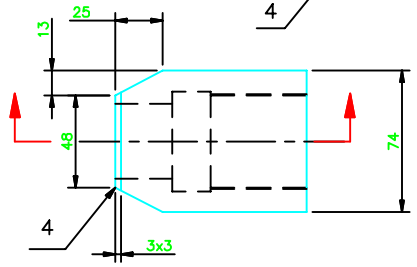

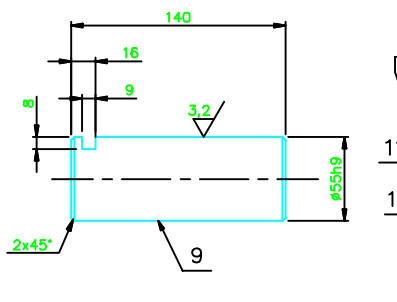

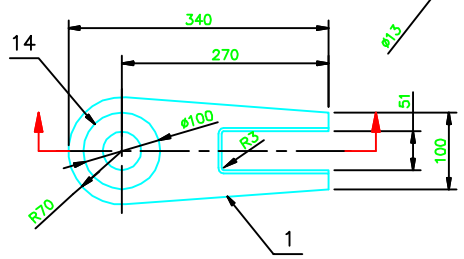

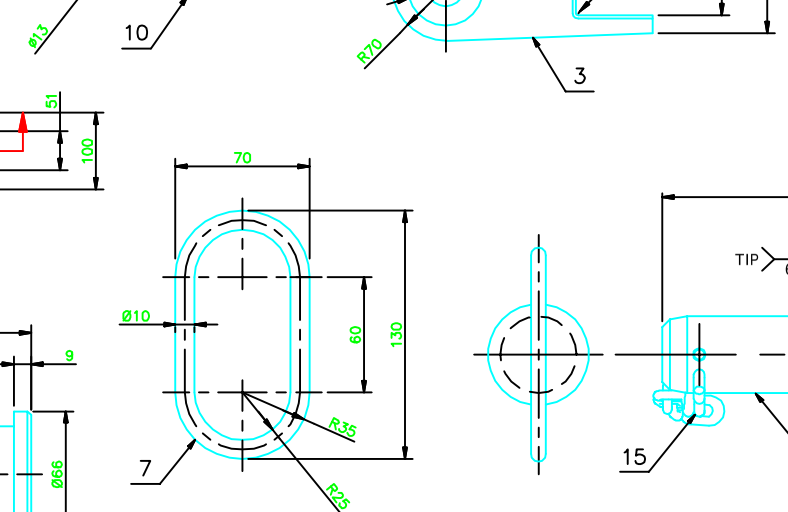

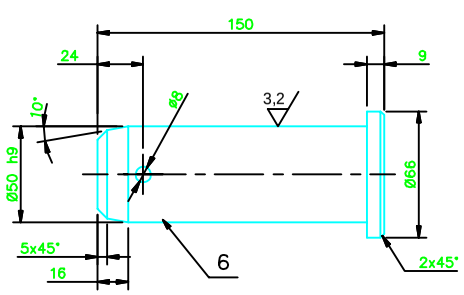

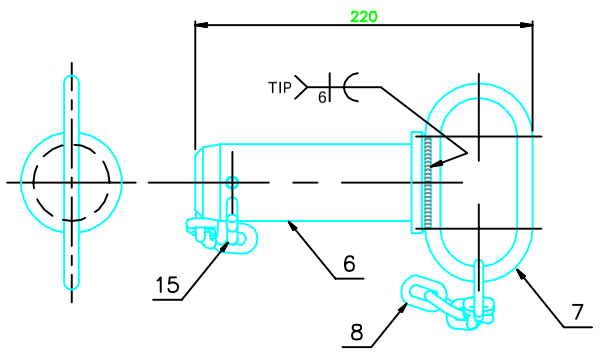

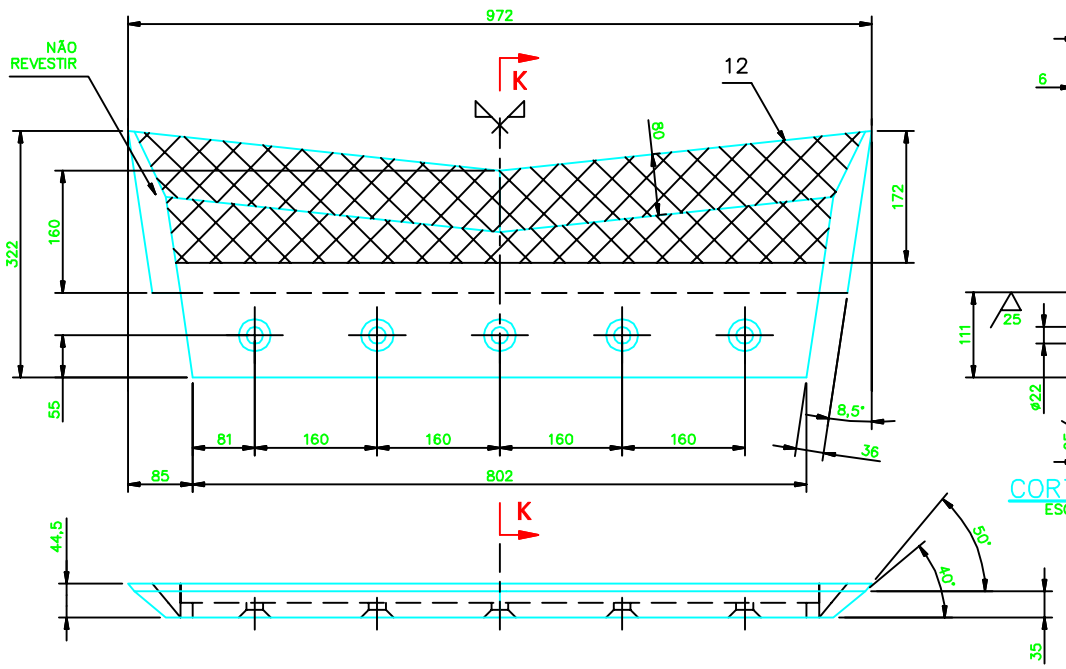

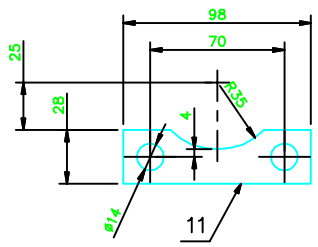

LISTA DE MATERIAIS

ITEM	QUANT.	DESCRIÇÃO	OBS.	MATERIAL	PESO
	1	TIRANTE RÍGIDO			31.3
1	2	CH 54 x 140 x 340	REC./USIN.	SAR – 50A	18.4
2	1	TUBO MEC. Ø50/27 x 928		VMec 134AP	11.4
14	4	DISCO Ø100/50x8	USINADO	SAR – 50A	1.5
	1	TIRANTE REGULÁVEL			33.4
1	1	CH	REC./USIN.	SAR – 50A	9.2
3	1	CH 54 x 170 x 340	REC./USIN.	SAR – 50A	10.0
4	1	TUBO MEC. Ø71/39 x 100	USINADO	VMec 134AP	2.4
5	1	TUBO MEC. Ø50/27 x 848	USINADO	VMec 134AP	10.4
14	4	DISCO Ø100/50x8	USINADO	SAR – 50A	1.5
	2	PINO ARTICULAÇÃO TIRANTE			6.5
6	2	PINO Ø50h9 X 162 (TREFILADO)	USINADO	SAE 4140	4.8
7	2	BR REDONDA Ø9,5 x 287		SAE 1020	0.3
8	2	CORRENTE DE ELOS Ø6–22x40x20 ELOS	ZINCADO	AÇO	1.1
15	2	GRAMPO Ø8 x 50 – DIN 11024	ZINCADO	AÇO	0.3
	2	PINO ARTICULAÇÃO CAÇAMBA			5.2
9	2	PINO Ø55h9 X 140 (TREFILADO)	USINADO	SAE 4140	5.2
	2	PLACA DE TRAVAÇÃO			0,3
10	2	CH 8 x 30 x 100		ASTM–A36	0,3
	2	CHAPA DE SEGURANÇA			0.1
11	2	CH BITOLA 20 x 28 x 98		SAE 1006	0.1
	2		VER NOTA 4		122.4
12	2	CH 44,5 x 322 x 972		XD–400 OU SIMILAR	122.4
	4		VER NOTA 4		152.7
13	4	CH 44,5 x 343 x 563	(DIR/ESQ)	XD–400 OU SIMILAR	152.7

PESO TOTAL APROXIMADO: 352.0

ThyssenKrupp Fördertechnik
Latino Americana

DESENHO CERTIFICADO

POR: LAERCIO F. RANGEL DATA: 05/05/09

TOLERÂNCIA – ISO 8015
TOLERÂNCIAS GERAIS – ISO 2768 – mK
RUGOSIDADE DE ACORDO C/ NORMA DIN EN ISO 1302
TOLERÂNCIAS GERAIS PARA CONSTRUÇÕES SOLDADAS:
EN ISO 13920–BF – MECÂNICA
EN ISO 13920–BF – ESTRUT. DE AÇO & CHAPA DE AÇO

NOTAS

1 – TODAS AS DIMENSÕES ESTÃO EM MILÍMETRO (E. A.).
2 – SOLDAS CONFORME NORMA "AWS" D14.1/D14.1M.
3 – TRABALHE OS DESENHOS DF–3011KN–M–532–M–109 (201.02_05.14.280_01), DF–3011KN–M–532–M–380 (201.02_05.14.280_02) E DF–3011KN–M–532–M–381 (201.02_05.14.280_03) EM CONJUNTO.
4 – CHAPA EM XD–400 (OU SIMILAR) COM 44,5mm DE ESPESSURA, REVESTIDA COM UMA CAMADA CRUZADA DE CORDÕES COM 6mm DE ALTURA NAS DUAS FACES, COM ELETRODO ESPECIAL PARA DUREZA ENTRE 60 E 65 HRC.
5 – LISTA DE MATERIAIS PARA 01 CJ., FABRICAR 18 CJS.

DOCUMENTOS DE REFERÊNCIA

SISTEMA RODA DE CAÇAMBA: DF–3011KN–M–532–M–105 (201.02_05.14.000_01).

REVISÕES

REV.	T.E.	DESCRIÇÃO	PROJ.	DES.	VER.	APR.	DATA
2	E	ONDE INDICADO (1X)	TKF	EV	PN	LR	05/03/10
1	E	CERTIFICADO PARA CONSTRUÇÃO	TKF	EL	OM	LR	05/05/09
0	C	EMISSÃO INICIAL	TKF	EDSON	OM	LR	09/04/09

TIPO DE EMISSÃO: (A) PRELIMINAR (B) PARA APROVAÇÃO (C) PARA CONHECIMENTO (D) PARA COTAÇÃO (E) PARA CONSTRUÇÃO (F) CONFORME COMPRADO (G) CONFORME CONSTRUÍDO (H) CANCELADO

VALE

ThyssenKrupp Fördertechnik
Latino Americana

PROGRAMA 130 MTPA — N1040–01

COMPLEXO MINERADOR DE CARAJÁS
PILHA DE REGULARIZAÇÃO
RECUPERADORA TIPO PONTE RC–3011KN–01
SISTEMA RODA DE CAÇAMBAS
CAÇAMBA – TIRANTES, PINOS E FACAS

ESCALA	SE	N~TKFLA	N~VALE	REVISÃO
IND.	–	201.02_05.14.280_03	DF–3011KN–M–532–M–381	2