SERVICE LETTER 1

Dear Sir;

On our coolers assembled to the two main electric motors for swinging there are filter inserts mounted to clean up the air used for cooling. These filter inserts become blocking by dirt within a certain period of time. This may cause a thermical damage of the electric main motors after time.

Therefore we strongly recommend to wash or replace these filter inserts periodically. The washing procedure can be done by using slightly soapy water for example.

Best regards,

Huss Maschinenfabrik
GmbH & Co. KG

SERVICE LETTER 2

Dear Sir,

according to a changing of technical HUSS safety regulations for the amusment ride "FRISBEE" we would like to inform you about an increasement of the tightening torque for the bolts of the seat system as also shown on the enclosed drawing 29.00A-1.

The bolts marked in the a.m. drawing with "A" and "B" have to be tightended from today with **1000 Nm**. So the old tightened torque about 770 Nm is not valid anymore.
Please take care as soon as possible.

With best regards,

Huss Maschinenfabrik
GmbH & Co. KG

SERVICE LETTER 3

Abstract of issue: Restraint bar units gondola

Reason for release: Incident on a HUSS ride type FLICFLAC

Action to be taken: Supplement of maintenance manual

Dear Sirs,

According to our records you are the owner/operator of a HUSS FRISBEE amusement ride. If this is no longer the case, please return this letter to us together with the name, address and contact information of the current owner.

With reference to a FLIC FLAC ride (which has the similar restraint system installed), be advised that an incident occurred earlier this year where a young female guest while enjoying a ride was seriously injured. Huss personnel and inspection officials investigated the incident and although the specific cause(s) of the incident where not able to be identified, it was determined that no mechanical failure of the restraint system occurred.

There was however several operational factors which may have contributed to the incident. As such we want to remind you and your employees of the contents of the operation manual which states:

"It is prohibited to lean out of the gondola, to stretch out arms and legs, to smoke and to take animals, umbrellas, sticks or any other bulky, pointed or loose objects whatever onto the ride. During the ride, the passengers must sit still and hold onto the grip bars provided for this purpose. Passengers must rest their heads against the back of the seat or the head cushion, and;

The operator must not start the ride until:

a) all shoulder and lap bars in the gondola are properly closed and locked,

b) an attendant has checked that each single passenger is properly seated and is being properly held by the shoulder and lap bars, i. e. that the bars fit snugly against the passenger's body and that their retention function is not in any way impaired by clothing (it is not sufficient for the operator himself to check this, because he is lo-cated too far away from the gondola),"

It is very important that ride operators ensure that all guests are seated properly and that the restraints are locked and firmly pressing against each guest before starting the ride. Ride operators must conduct a pre ride inspection of each restraint and ensure that they are adjusted properly. Guests must not be permitted to carry on personal belongings such as camera, backpacks or purses. In addition guests must not be permitted to place personal items between themselves and the seat restraints.

Please take care of the below mentioned supplement for your maintenance manual.

Subject FRISBEE Gondola Passenger Restraints (Shoulder Bars)

Supplement to the maintenance instructions, please add to your operating/maintenance instruc-tions

Daily Maintenance

1) Check the cushions of the passenger restraints for damage (visual check)
2) Check the locking mechanisms of the passenger restraints in the area of the mounting axle and fork heads for cracks. (visual check)

3) When the restraints open, watch out for restraints that swing up fast, adjust this with the "brake" Items 52, 53 and 53.1.

Item numbers refer to Drawing No. B1-24A.003 Sheet 5 (enclosed)

Monthly Maintenance

1) Remove the rear gondola panelling elements
2) Lubricate the pin Item 15 and the bearing in the fork head Item 32 and check for easy running.
3) Clean the locking mechanisms, especially Items 11, 11.1, 14, with a cleaning spray e. g. "Bremsenreiniger" [Brake Cleaner] from the Berner company.
4) Hairs and other particles of dirt must be removed.
5) The dimension of the toothed rack Item 11 dimension 22 mm must not be undershot on any tooth (see attached drawing regarding the wear limit).
6) Check the condition of the stop (rubber buffer). Visual check.
7) Check the pneumatic cylinders and lines for any leaks (leak detection spray)
8) Check the manometer setting of 3 bar.
9) Moving parts must be lubricated with a bearing grease Beacon EP2.

Item numbers refer to Drawing No. B1-24A.003 Sheet 5 (enclosed)

Exchange of individual parts, spare parts supply

When the wear limit has been reached (Item 11, 22 mm) or after an operating period of max. three (3) years, both locking units of each seat should be sent in to the makers Huss for an overhaul.
The units must be sent in complete with the bearing heads Item 32, the pin Item 15, and the limit switches.
Installation and the necessary settings must be carried out by the Huss company. HUSS then issues a corresponding certificate.
No spare parts may be exchanged without prior consultation and agreement with the Huss company.

Should you have any questions regarding this or any ride operation procedures please contact the Huss Service Department at 011 49 421 499 00.

HUSS
MASCHINENFABRIK

Refurbishment Instruction for friction gear truss – Frisbee
Assemblies 29.009-1 and 29.009.E-1
Relating refurbishment drawing: 29.009.S-2

Basis for refurbishment is drawing no. 29.009.S-2. Damages might occur at two and/or three positions:

1. Crack in circulation direction inside the jacket plate (Pos. 1, 29.009.S-2), below the flange level (Pos. 4, 29.009.S-2).(marked with 11)
2. Crack at the edge of the seam between Pos. 5 and Pos. 4 outside the jacket plate (29.009.S-2) (marked with 12)
3. Crack in the seam between Pos. 5 and Pos. 1 (29.009.S-2) (marked with 13).

First, the crack under point 1 must be repaired. This must be worked out carefully, at least until a depth where the crack completely disappears. The assumed diffusion direction is going off beveled, possibly until the melting zone of the lower fillet weld between pos. 4 and Pos. 1. The adjacent interior faces of the jacket plate (Pos. 1) must be cleansed from rust and dirt. The welding is an continuous welding in several layers, whose surface must be finished evenly.

Secondly, the ring Pos. 5 must be deleted. For that purpose, the seams at the marks 12 and 13 must be abraded. At mark 12 it is a Half-V butt joint with not full cross-sections, i.e. dependant on the melting zone, a wedge-shaped countersinking with each 8-9 mm in the cross-section triangle blade would be sufficient (if not, the measurements of the countersinking shall be increased gradually until this part separates. Caution! The basic cross-section of Pos. 1 and 4 may – as far as possible – not be destroyed!) Afterwards, Pos. 5 must be cut at two areas in the reversed condition and deleted.

Now, the possible broadening of the cracks with marks 12 and/or 13 can be tested. Executing the refurbishment goes necessarily into the jacket plate until the end of the crack.
The refilling refurbishment welding must recondition the basic cross-section thickness of Pos. 1 and 4. Furthermore, a fillet weld must be accomplished between Pos. 1 and Pos. 4. at the top around the released edge according to the drawing.

For reinforcing purposes, a total of 11 ribs must be welded afterwards from the interior to the jacket plate (see drawing 29.009.S-2). The new separation plates must, however, be adapted to the ribs, manufactured and welded into according to the drawing (Pos. 6 and 7).Therefore, the left-overs of the interior separation plates must be deleted kerf-free.

After the corrosion protection works only the upper closing plate must be welded into.

Recommendation for a better identification of crack distribution: during gouging the crack should be done with co/bow arc.

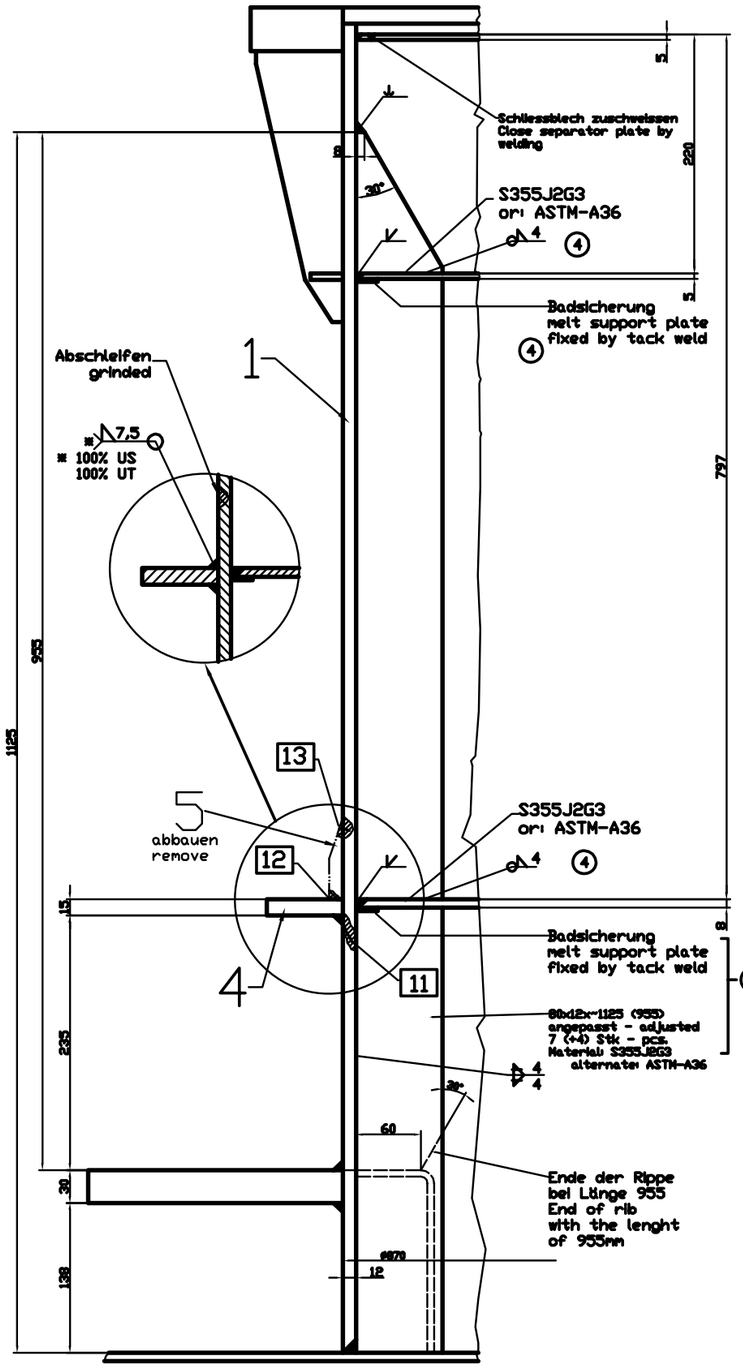
~~*Envision a boring Bohrungen for a later borescope examination; do not close!*~~
Examination borings should be closed permanently (at least water-tight).

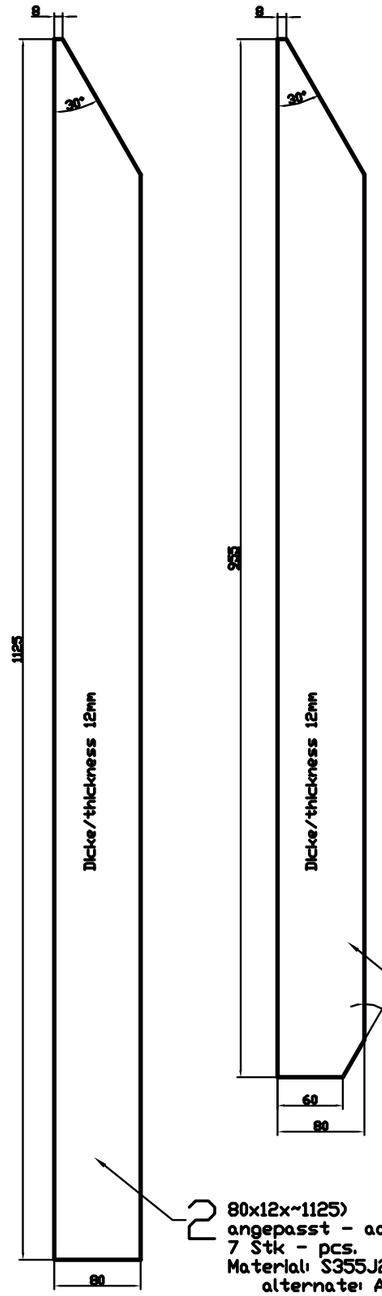
Provided that possibly detected cracks in the outside area (see our Service-Letter 29-07) were refurbished according to the above-mentioned measurements and that the test for cracks according to our Service-Letter 29-07/1 turns out negatively (no cracks), you are allowed to operate your Frisbee ride until the end of the season 2006 without further inspection.
In case the test for cracks (our Service-Letter 29-07/1) may turn out positively, the refurbishment measurement provided by us must be effected.

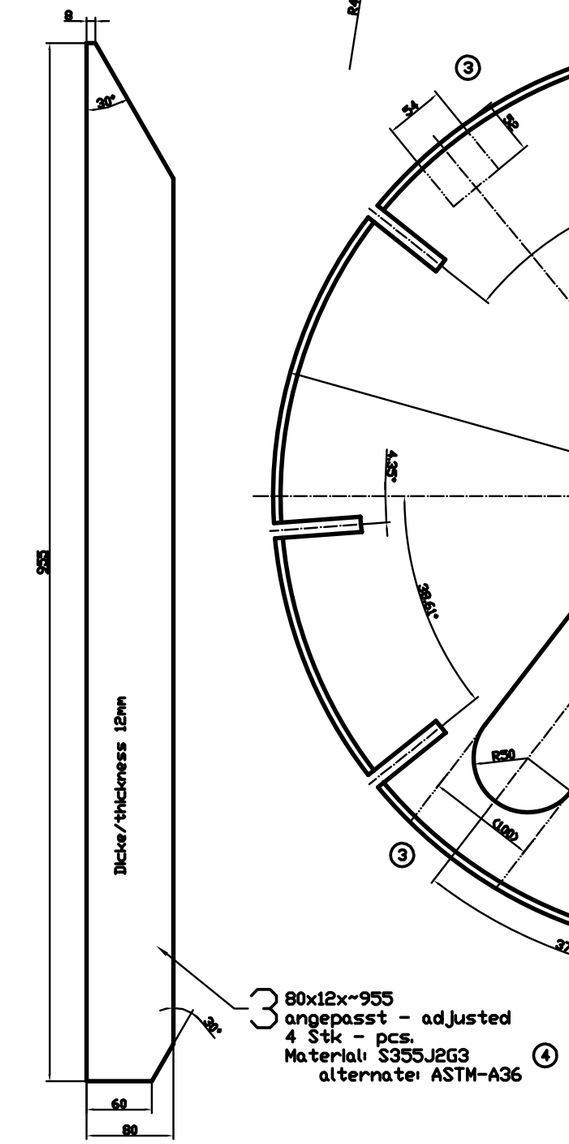
Encl.:
Drawing 29.009.S-2

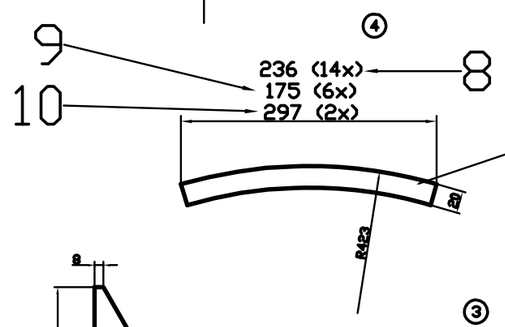
2006-04-28

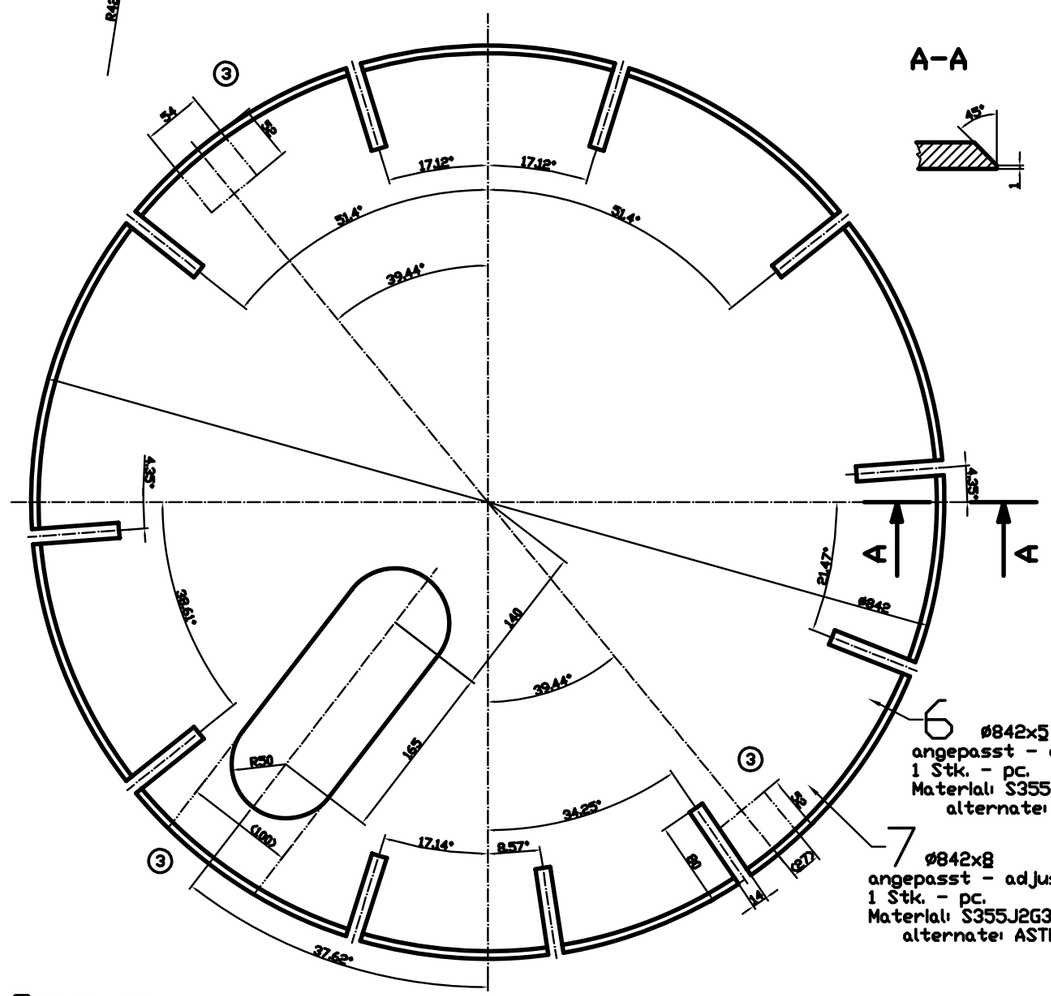
András Beck	János Sváb
Welding Engineer	Engineering











③ Ausschneiden, nach Einbau zuschweißen
Openings to be cut: weld-in after built-in

Badsicherungsbleche
melt support plates
Dicke/thickness 3mm

6 ø842x5
angepasst - adjusted
1 Stk. - pc.
Material: S355J2G3
alternate: ASTM-A36 ④

7 ø842x8
angepasst - adjusted
1 Stk. - pc.
Material: S355J2G3
alternate: ASTM-A36 ④

3 80x12x~955
angepasst - adjusted
4 Stk - pcs.
Material: S355J2G3
alternate: ASTM-A36 ④

2 80x12x~1125)
angepasst - adjusted
7 Stk - pcs.
Material: S355J2G3
alternate: ASTM-A36 ④

Sanierung Reib-radantriebsrträger (Längsschnitt)

Refurbishment Friction Gear Drive - longitudinal section

04	See indications	2006-06-13	Svåb
03	Additional recesses	2006-06-06	Svåb
02	Item 5. omitted	2006-04-28	Svåb
01	Items indicated	2006-04-25	Svåb

(Verwendungsbereich)			(Zul. Abw.)		(Oberfl.)	Maßstab 1:4 (Gewicht)
						(Werkstoff, Halbzeug) (Rohteil-Nr.) (Modell- oder Gesenk-Nr.)
				Datum	Name	
			Bearb.	2006-04-04	SVÅB	Sanierung Frisbee - Reibradantriebsträger
			Gepr.			Refurbishment Frisbee - Friction Gear Drive
			Norm			
04	Siehe in der Zng.	2006-06-13 Svåb				29.009.S-2
03	Zus. Ausschnitte	2006-06-06 Svåb				Blatt
02	Wegbl. Pos.5. gez.	2006-04-28 Svåb				Bl.
01	Positionen gezeigt	2006-04-25 Svåb				
Zust.	Änderung	Datum Name	(Urspr.)		(Ers. f.:)	(Ers. d.:)