



ALCAN COMPACT DEGASSER (ACD)

US patents # 5593634, 5656236, 5527381

Questionnaire (Confidentiality Respected)

COMPANY NAME: _____

ADDRESS: _____

CONTACT NAME: _____

PHONE: _____ FAX N°: _____

E-MAIL ADDRESS: _____

OUR REF: _____ YOUR REF: _____

DATE: _____

A – METALLURGICAL EVALUATION

OBJECTIVES:

- 1 - Among the following benefits, indicate your order of priority:
- a) Improve degassing efficiency _____
 - b) Reduce alkali concentration _____
 - c) Improve metal cleanliness _____
 - d) Reduce quantity of dross (principally valid for sealed unit) _____
 - e) Eliminate use of chlorine _____
 - f) Reduce maintenance costs _____
 - g) Eliminate metal hold-up between casts _____

B – PROCESS

- 2 - Typical incoming hydrogen level: _____
- 3 - Expected hydrogen level at output from degasser: _____
- 4 - Type of hydrogen monitor: _____

5 - Temperature of metal in trough during casting (steady-state conditions):

	Furnace spout	Degasser location
a) <i>typical:</i>		
<i>minimum:</i>		
<i>maximum:</i>		
b) <i>during casting (steady-state conditions):</i>		

6 - Casthouse temperature conditions during summer (ideally near the casting pit) – if unknown, indicate the outside conditions :

SUMMER CONDITIONS OUTSIDE CONDITIONS

a) *ambient temperature (°C):* TYPICAL _____ MIN _____ TYP. _____

b) *relative humidity:* TYPICAL _____ MIN _____ TYP. _____

7 - Metal flow rate to be treated, in kg/min: TYPICAL _____ MIN _____ MAX _____

8 - Incoming metal:

ALKALI CONCENTRATION (ppm or %)			
	TYPICAL	MAX	OUTCOMING LEVEL REQUIRED
<i>Na</i>			
<i>Ca</i>			
<i>Li</i>			

INCLUSION CONCENTRATION			
TYPICAL	MIN	MAX	TECHNOLOGY USED
			LIMCA <input type="checkbox"/> (K/kg Al)
			PoDFA <input type="checkbox"/> (mm ² /kg)

9 - Normal casting time for complete drop, *in minutes:* _____

10 - Number of casts per day: _____

11 - Frequency of alloy changes (approx.): _____

12 - Type of alloys and % of production, e.g.:

Note: For each alloy series, please specify the alloy (AA Code).

<input type="checkbox"/> 1XXX	_____ %	Code AA _____	<input type="checkbox"/> 2XXX	_____ %	Code AA _____
<input type="checkbox"/> 3XXX	_____ %	Code AA _____	<input type="checkbox"/> 4XXX	_____ %	Code AA _____
<input type="checkbox"/> 5XXX	_____ %	Code AA _____	<input type="checkbox"/> 6XXX	_____ %	Code AA _____
<input type="checkbox"/> 7XXX	_____ %	Code AA _____	<input type="checkbox"/> 8XXX	_____ %	Code AA _____
<input type="checkbox"/> AXXX	_____ %	Code AA _____			

13 - Critical alloys greater than 2% magnesium: YES NO

Note: Critical alloys greater than 2% magnesium (needing a high quality level) should be filtered with a deep bed filter.

Need further information about Alcan Bed Filter: YES NO

14 - a) End product(s) (ex.: slabs, billets): _____

b) Casting method (ex.: DC-Wagstaff, HDC-Hertwich): _____

15 - Do you intend using chlorine? YES NO

16 - Availability of:

a) Argon (Ar): _____ litres/min Pressure: _____ (psig or barg)

b) Chlorine (Cl₂): _____ litres/min Pressure: _____ (psig or barg)

17 - Gas scrubber:

a) Available: YES NO

b) Equipment type: _____

C – EQUIPMENT

18 - Replacement degasser New degassing application

19 - Distance between holder and degasser (trough length): _____

20 - Type of metal control system in trough:

LASER FLOTATION ULTRASONIC ELECTRODES

Other (specify): _____

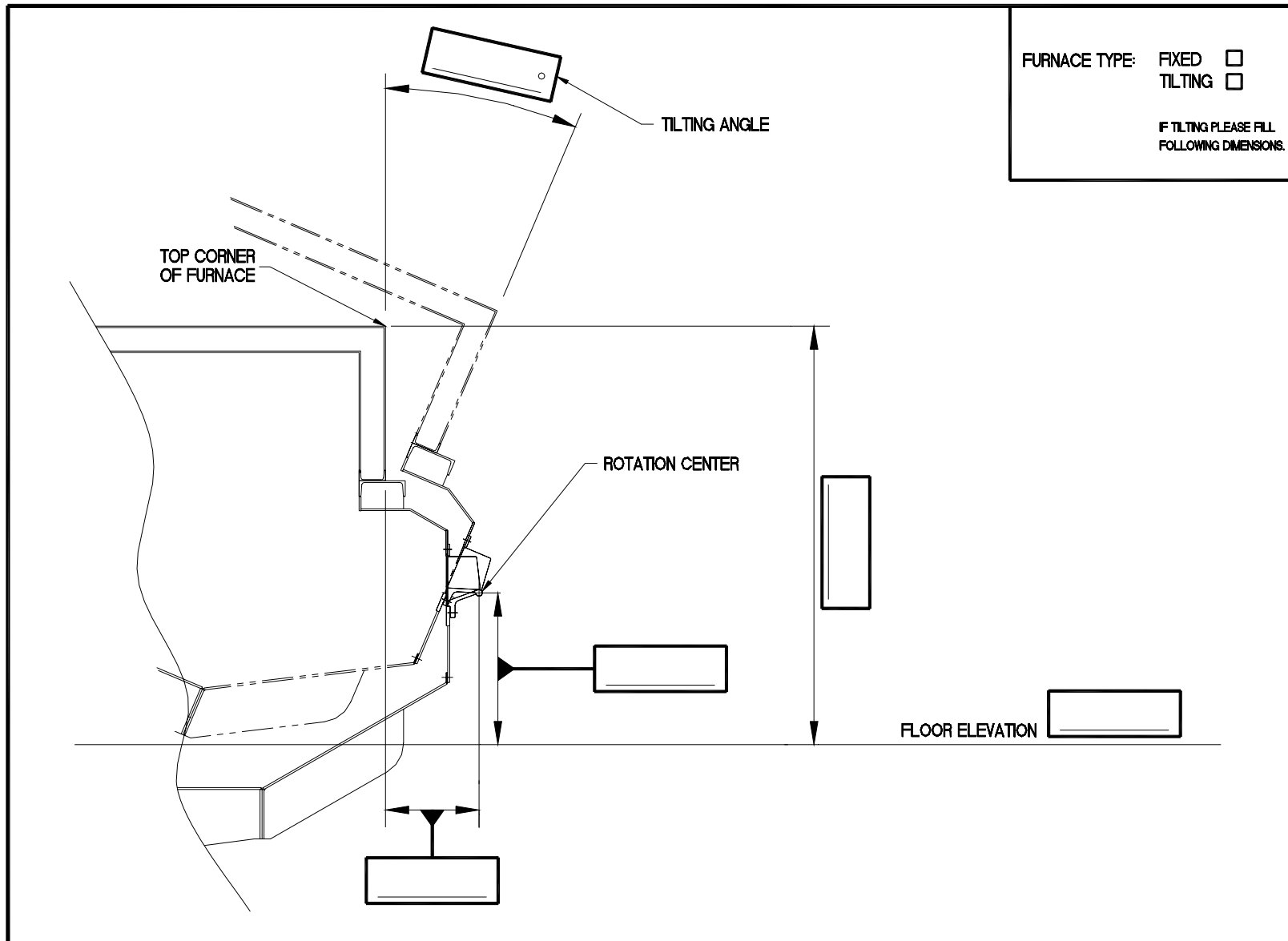


Figure 1

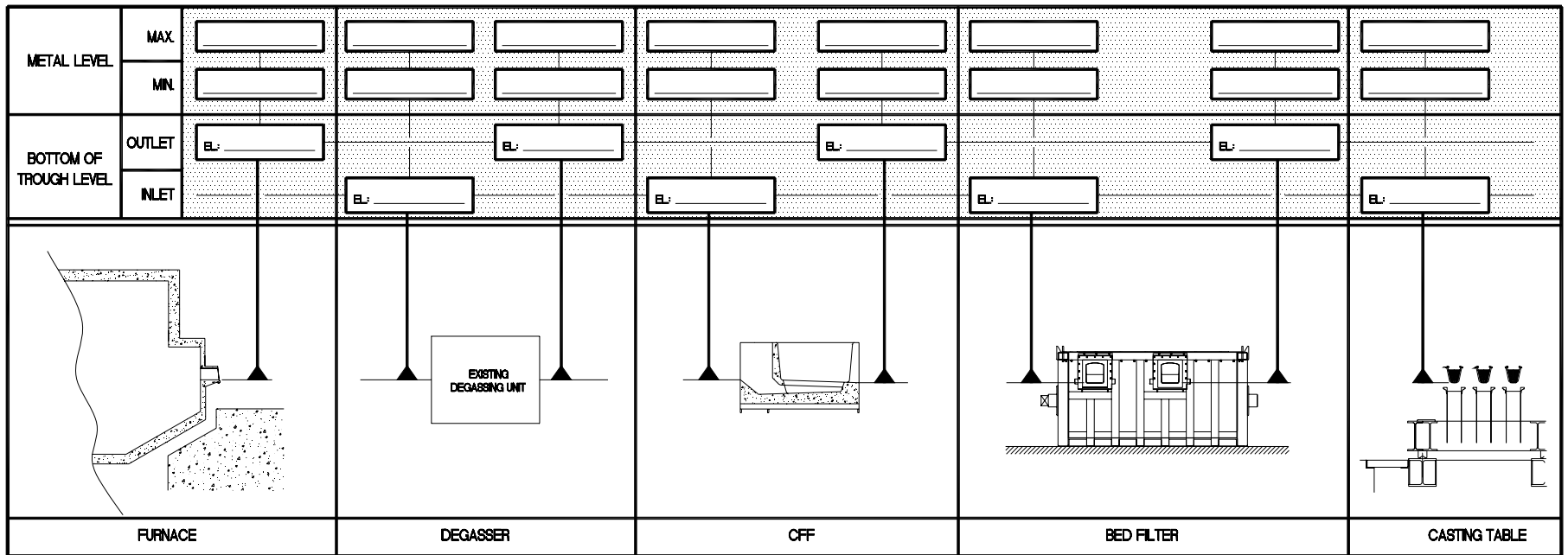
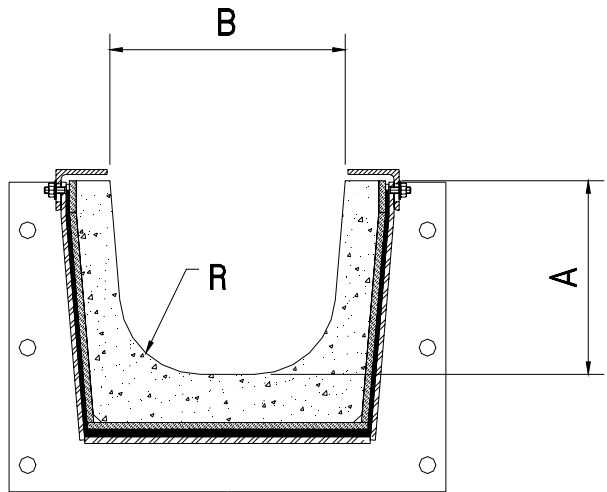


Figure 2

EXAMPLE:



SKETCH:



Figure 3