



Beryllium Science & Technology Association

Summary of the BeST Customer Survey

Number of questionnaires evaluated: 56/57

Markets

Markets Served	Number
Airplane production	19
Automotive	33
Oil and Gas Exploration	4
Appliance	12
Plastics	6
Space & Satellite Equipment	6
Defence	7
Dental	1
IT Technologies	3
Telecom	9
Medical	7
Watch Making	3
Aluminium Production	11
Steel Production	--
Light Metal Manufacturing	8
Radio, television & communication equipment	5
Tool making & equipment manufacturing	14

Processes

Operations Performed	Number	Operations Performed	Number
Stamping	17	Sanding	12
Assembly	13	Polishing	6
Blanking	8	Melting/Casting	26
Machining	15	Sawing	19
Drawing	2	Buffing	0
Milling	14	Pickling	4
Drilling	11	Etching	0
Shearing	7	Cold Rolling	5
Deburring	10	Hot Rolling	7
CNC Machining	11	Laser machining, cutting, marking, scribing, welding	1
Torch Cutting	0	Abrasive Blasting with coal ash agents	0
Forming	7	Redrawing	1
Heat Treating	22	Slitting	6
Extruding	4	Welding	10
Abrasive Cutting	5	Soldering	3
EDM	1	Plating	4
Spot Welding	4		

Employment Information

1. Total number of employees (summed up over all questionnaires): **18638**

2. Differentiation with regard to number of employees:

Number of employees per company	Number of companies
>250 employees	17
50 – 250 employees	24
10 – 50 employees	11
< 10 employees	4

3. Total number of employees reportedly exposed to airborne beryllium (summed up over all questionnaires): 1317

Differentiation with regard to number of employees:

Company size	Number of companies reporting about worker exposure to beryllium	Total number of employees reportedly exposed to airborne beryllium in these companies	Number of companies performing air measurements (Source of measurements)	Reported or estimated exposure level
>250 employees	6	636	Air measurements: 5 <ul style="list-style-type: none"> • Authorities:1 • Self-measurement: 1 • Consultant:3 	1 – 2 $\mu\text{g}/\text{m}^3$: 1 0.2 – 1.0 $\mu\text{g}/\text{m}^3$: 2 0.06 -0.2 $\mu\text{g}/\text{m}^3$: 1 (1 estimated) Below 0.06 $\mu\text{g}/\text{m}^3$: 2
50 – 250 employees	7	544	Air measurements: 9 <ul style="list-style-type: none"> • Authorities:4 • Consultant:5 	0.2 – 1.0 $\mu\text{g}/\text{m}^3$: 1 0.06 -0.2 $\mu\text{g}/\text{m}^3$: 8 (3 estimated) Below 0.06 $\mu\text{g}/\text{m}^3$: 3
10 – 50 employees	3	124	Air measurements: 4 <ul style="list-style-type: none"> • Authorities:1 • Self-measurement: 2 • Consultant:1 	0.06 -0.2 $\mu\text{g}/\text{m}^3$: 6 (2 estimated) Below 0.06 $\mu\text{g}/\text{m}^3$: 1 (1 estimated)

< 10 employees	2	13	Air measurements: 2 • Consultant:2	Below 0.06 µg/m ³ : 2 (1 estimated)
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Number of employees reportedly exposed to airborne beryllium	Reported or estimated exposure level
0	> 2.0 µg/m ³
85	1 – 2 µg/m ³
166	0.2 – 1.0 µg/m ³
573	0.06 -0.2 µg/m ³
212	Below 0.06 µg/m ³

- Out of a total of 57 questionnaires received, 54 companies reported that none of their employees have been diagnosed with CBD while 3 companies did not submit any information concerning potential diagnosed CBD cases.

4. % of yearly production volume that is associated with alloys containing beryllium (summed up over all questionnaires):

Mean value: **22,4%**

Median: **9,6%**

Range: **<0,001 - 100%**