



SKILL REQUIREMENT IN GEMS & JEWELLERY SECTOR (2013 – 2022)

**Gem & Jewellery Skill Council of India
Business Facilitation Centre, 3rd Floor
Seepz Special Economic Zone.
Andheri (E). Mumbai 400 096.**

The estimated manpower requirement has been calculated based on the IMaCS study of manpower requirement for the period 2012-2013. As per the study the industry is expected to require about double the amount of workforce in 2022-23 as compared to 2012-2013. The highest demand growth is expected to come from the cast and machined jewellery manufacturing segment and the lowest from the hand-made segment. All segments except the handmade are expected to increase productivity. This means that the fall in employment demand because of higher productivity is likely to be compensated by the expected 18-20 per cent average market growth. Jewellery retailing segment is expected to continue to contribute significantly to employment growth and be that largest employment segment. The gemstone processing segment is likely to turn to greater mechanisation in the coming years, thereby increasing productivity and hence lower employment creation, although in the immediate future the employment demand remains high. The diamond processing is already mechanised and hence employment generation will come from market growth.

Gems & Jewellery Industry Classification:

Processing	Manufacturing	Retailing
Diamond processing	Cast and diamonds-set	Jewellery retail
Gemstone processing	Handmade gold and gems-set	

Employment in Gems & Jewellery Sector:

Employment	2012-13	2017-18	2022-23	Incremental (2013-23)
Cast and diamonds-set	607,500	1,172,457	1,869,364	1,261,864
Handmade gold and gems-set	880,297	954,416	1,218,446	338,150
Diamond processing	1,039,163	1,434,919	1,981,394	942,231
Gemstone processing	614,530	949,480	1,174,635	560,105
Jewellery retail	1,500,000	2,283,046	2,971,308	1,471,308
Total	4,641,490	6,794,319	9,215,147	4,573,658

Estimated uptake calculation methodology

In the IMaCS study the manpower requirement for the year 2013 for each job role in all the sub sectors was calculated through industry interaction. Since the industry growth during the period 2013 – 2022 has been compensated by automation of the sector, the percentage of manpower requirement for the year 2022 has been assumed to remain the same as in the year 2013. For example the estimated manpower requirement for the job role of a CAD Designer for the year 2013 was 18000 when the total estimated manpower for the sub sector was 607,500, which is 2.96% of the total manpower, so when the estimated manpower in 2022 becomes 1,869,364 the uptake for CAD designer remains at 2.96% of this projection i.e. which is 55389.

Same methodology has been employed to calculate the estimated uptake for all the job roles.

The Estimated manpower uptake between 2013 and 2022 in Cast and diamonds-set sub sector

Total manpower requirement in 2013 = 607,500		Total estimated manpower requirement in 2022 = 1,869,364		
Cast and diamonds-set		Estimated uptake in 2013	Percentage uptake in 2013	Estimated uptake for the period 2013-2022
1.	Accounts	25500	4.20%	78467
2.	Bagger and Flueter	9000	1.48%	27694
3.	Business Head	3000	0.49%	9231
4.	CAD Designer	18000	2.96%	55389
5.	CAM operator	3000	0.49%	9231
6.	Casting Machine Operator	25500	4.20%	78467
7.	Diamond Assorter	9000	1.48%	27694
8.	Filer and Assembler	58500	9.63%	180013
9.	FINAL QC	16500	2.72%	50773
10.	Hand Sketch Designer (Advance)	9000	1.48%	27694
11.	Hand Sketch Designer (Basic)	9000	1.48%	27694
12.	House keeping	6000	0.99%	18463
13.	HR & Admin	6000	0.99%	18463
14.	Inventory Manager	15000	2.47%	46157
15.	IT Services	6000	0.99%	18463
16.	Laser M/c Op.	3000	0.49%	9231

17.	Marketing Head	3000	0.49%	9231
18.	Master maker (Hand)	10500	1.73%	32310
19.	Merchandiser	3000	0.49%	9231
20.	Metal Setter (Advance - Micro-setter)	3000	0.49%	9231
21.	Metal Setter (Basic)	51000	8.40%	156934
22.	Operations Head	7500	1.23%	23079
23.	Order Processor/ Order taker	15000	2.47%	46157
24.	PD Manager	7500	1.23%	23079
25.	Plater	21000	3.46%	64620
26.	Polisher	58500	9.63%	180013
27.	Procurement Manager – PM & Diam.	6000	0.99%	18463
28.	Production Mgr.	12000	1.98%	36926
29.	Refiner	6000	0.99%	18463
30.	Rubber Mould Maker	18000	2.96%	55389
31.	Sales Exec.	9000	1.48%	27694
32.	Sales Mgr.	15000	2.47%	46157
33.	Security	16500	2.72%	50773
34.	Supervisor- Casting/ QC	3000	0.49%	9231
35.	Supervisor –Filing/ QC	6000	0.99%	18463
36.	Supervisor for Plating	3000	0.49%	9231
37.	Supervisor for Waxing / QC	3000	0.49%	9231
38.	Supervisor –Polishing/ QC	6000	0.99%	18463
39.	Supervisor-Setting/ QC	6000	0.99%	18463
40.	Supervisor-Wax Setting/ QC	6000	0.99%	18463
41.	Tagger &Labeller	12000	1.98%	36926
42.	Wax Piece Maker	16500	2.72%	50773
43.	Wax Setter (Advance - Micro-setter and machine setting)	3000	0.49%	9231
44.	Wax Setter (Basic)	55500	9.14%	170781
45.	Wax Tree Maker	3000	0.49%	9231

The Estimated manpower uptake between 2013 and 2022 in Hand made gold and gems-set sub sector

Total manpower requirement in 2013 = 880300		Total estimated manpower requirement in 2022 = 1218446		
Handmade gold and gems-set		Estimated uptake in 2013	Percentage uptake in 2013	Estimated uptake for the period 2013-2022
1.	Accounts	6356.00	0.72%	8798
2.	Assayer & hallmarker	12712.00	1.44%	17595
3.	Designer - CAD	6356.00	0.72%	8798
4.	Designer- Hand sketch (Adv.	3178.00	0.36%	4399
5.	Designer- Hand sketch (Basic)	3178.00	0.36%	4399
6.	Enameling Goldsmith	19068.00	2.17%	26393
7.	Goldsmith – C/E/R	19068.00	2.17%	26393
8.	Goldsmith – comp.+filer	63559.00	7.22%	87974
9.	Goldsmith – frame+filer	381356.00	43.32%	527845
10.	HR and Admin	12712.00	1.44%	17595
11.	Jadau setter	19068.00	2.17%	26393
12.	Kundan Goldsmith	19068.00	2.17%	26393
13.	Locker Manager	6356.00	0.72%	8798
14.	Master maker (Hand)	6356.00	0.72%	8798
15.	Melter & refiner	3178.00	0.36%	4399
16.	Merchandiser	6356.00	0.72%	8798
17.	Order processor	12712.00	1.44%	17595
18.	PD Manager	6356.00	0.72%	8798
19.	Polisher & cleaner	31780.00	3.61%	43988
20.	Production Mgr/ Job work Head	6356.00	0.72%	8798
21.	Promoter	19,068	2.17%	26393
22.	QC Inspector	3178.00	0.36%	4399
23.	Raw material proc. Mgr.	12712.00	1.44%	17595

24.	Sales/ Mkting. Head	6,356	0.72%	8798
25.	Security	19068.00	2.17%	26393
26.	Setter	76271.00	8.66%	105569
27.	Sorter	31780.00	3.61%	43988
28.	Storekeeper	6356.00	0.72%	8798
29.	Supervisor – C&P	19068.00	2.17%	26393
30.	Supervisor - setting	19068.00	2.17%	26393
31.	Supervisor-F&C	19068.00	2.17%	26393
32.	Tagger & Labeller	3178.00	0.36%	4399

The Estimated manpower uptake between 2013 and 2022 in Diamond processing sub sector

Total manpower requirement in 2013 = 1039165		Total estimated manpower requirement in 2022 = 1981394		
Diamond processing		Estimated uptake in 2013	Percentage uptake in 2013	Estimated uptake for the period 2013-2022
1.	Accounts	8562	0.82%	16325
2.	Auto blocking machine operator	2604	0.25%	4965
3.	Auto Bruter	10417	1.00%	19862
4.	Blade sawing op.	6510	0.63%	12413
5.	Blade sawing supervisor	543	0.05%	1035
6.	Boiling personnel	5137	0.49%	9795
7.	Calibration m/c op.	4281	0.41%	8163
8.	Cleaver	10417	1.00%	19862
9.	Data entry person	5708	0.55%	10884
10.	Designer / Planner	57292	5.51%	109240
11.	Die fixer/ dop maker	32813	3.16%	62565
12.	Girdle polisher	52083	5.01%	99308
13.	HR and Admin	4281	0.41%	8163
14.	Inclusion plotter	36458	3.51%	69515
15.	Issue-Return In charge	31250	3.01%	59585
16.	IT	3139	0.30%	5985
17.	Laser Operator	26042	2.51%	49655
18.	Laser Supervisor	2604	0.25%	4965
19.	Manual blocker	10417	1.00%	19862
20.	Manual Bruter	52083	5.01%	99308
21.	Marker	15625	1.50%	29792
22.	Marketing Manager	1284	0.12%	2448
23.	Operations Manager	2568	0.25%	4896
24.	Packager & Dispatcher	3425	0.33%	6531

25.	Planning department manager	2568	0.25%	4896
26.	Planning supervisor	5729	0.55%	10924
27.	Plotting supervisor	3646	0.35%	6952
28.	Polish Assorter (Advanced)	2083	0.20%	3972
29.	Polish Assorter (Basic)	8333	0.80%	15889
30.	Polisher - bottom	234375	22.55%	446887
31.	Polisher - Top	234375	22.55%	446887
32.	Procurement Manager	1284	0.12%	2448
33.	Rough assorter	26042	2.51%	49655
34.	Sales/ Exports Manager	571	0.05%	1089
35.	Security	11986	1.15%	22854
36.	Spectrum operator	729	0.07%	1390
37.	Stock Manager	3139	0.30%	5985
38.	Strategy Manager	3425	0.33%	6531
39.	Supervisor - Blocking	6771	0.65%	12910
40.	Supervisor - Bruting	4167	0.40%	7945
41.	Supervisor - F&P/ QC	23438	2.26%	44690
42.	Supervisor - Final QC and grading	694	0.07%	1323
43.	Table Cutter	57292	5.51%	109240
44.	Training	1142	0.11%	2177
45.	Weigher	11416	1.10%	21767
46.	Window opener	10417	1.00%	19862

The Estimated manpower uptake between 2013 and 2022 in Gemstone processing sub sector

Total manpower requirement in 2013 = 614530		Total estimated manpower requirement in 2022 = 1174635		
Gemstone processing		Estimated uptake in 2013	Percentage uptake in 2013	Estimated uptake for the period 2013-2022
1.	Accounts	2000	0.33%	3823
2.	Business Head	1000	0.16%	1911
3.	Driller	3000	0.49%	5734
4.	Engraver	500	0.08%	956
5.	Facet maker	76040	12.37%	145346
6.	Final shaper and calibrator	57000	9.28%	108952
7.	HR & Admin	2000	0.33%	3823
8.	Inventory Mgr.	1000	0.16%	1911
9.	Manager Assorting	6000	0.98%	11469
10.	Marketing Head	15000	2.44%	28672
11.	Operations Head	1000	0.16%	1911
12.	Order processor	1000	0.16%	1911
13.	Packager & Dispatcher	12000	1.95%	22937
14.	Polisher (Normal & Girdle)	181960	29.61%	347805
15.	Pre-shaper & Calibrator	57000	9.28%	108952
16.	Procurement/ Import Manager	10	0.002%	19
17.	Rough cutter	57000	9.28%	108952
18.	Roughs Proc. Manager	6000	0.98%	11469
19.	Sales/ Exp. Mgr.	15000	2.44%	28672
20.	Security	2000	0.33%	3823
21.	Supervisor – F&P/ QC	12000	1.95%	22937
22.	Supervisor - Final QC and grading	42000	6.83%	80280
23.	Supervisor – RA/Bagging	48000	7.81%	91749

24.	Supervisor – RC/QC	3000	0.49%	5734
25.	Supervisor – Shaping/QC	6000	0.98%	11469
26.	Supervisor- Other proc.	1000	0.16%	1911
27.	Thread maker	6000	0.98%	11469
28.	Wholesale- Inventory Mgr.	10	0.002%	19
29.	Wholesale-Sales executive	10	0.002%	19

The Estimated manpower uptake between 2013 and 2022 in Jewellery retail sub sector

Total manpower requirement in 2013 = 1500000		Total estimated manpower requirement in 2022 = 2971308		
Jewellery retail		Estimated uptake in 2013	Percentage uptake in 2013	Estimated uptake for the period 2013-2022
1.	Assessor	59,287	3.95%	117440
2.	Cashier	1,04,222	6.95%	206450
3.	Floor manager	75,519	5.03%	149593
4.	Goldsmith(repairs)	8,019	0.53%	15885
5.	Housekeeping	75,000	5.00%	148565
6.	Inventory manager	62,972	4.20%	124739
7.	Jewellery RSA - Advanced	2,12,594	14.17%	421122
8.	Jewellery RSA- Basic	5,10,259	34.02%	1010758
9.	Labeller	18,685	1.25%	37013
10.	Marketing Executives	30,519	2.03%	60454
11.	Merchandiser	92,673	6.18%	183573
12.	Promoter	29,585	1.97%	58604
13.	Security	75,000	5.00%	148565
14.	Senior Mgmt. – Corp. Retail	45,259	3.02%	89652
15.	Store Manager	1,00,407	6.69%	198893