

**Annual Survey of Industries, 2012 – 2013**  
**Flow Chart for Tabulation Program**

*Volume – I( Table – 1 & 2)*

Srl.	Description	Formula
1	No. of factories	$A_{11}$
2	Factories in operation	$A_{11}$ , for $A_{12} = 1, 2, 3$
3	Fixed Capital	$\sum_{i=1}^9 C_{i,13}$ For $i \# 8$
4	Physical Working Capital	$\sum_{i=1}^6 D_{i,4}$ For $i \# 4$
5	Working Capital	$4 + D_{8,4} + D_{9,4} + D_{10,4} - (D_{12,4} + D_{13,4} + D_{14,4})$
6	Invested Capital	$3 + 4$
7	Gross Value of additions to fixed capital	$\sum_{i=1}^9 C_{i,5}$ For $i \# 8$
8	Rent paid	$F_{8,3} + F_{9,3}$
9	Outstanding Loan	$D_{17,4}$
10	Interest paid	$F_{10,3}$
11	Rent received	$G_{6,3} + G_{8,3} + G_{9,3}$
12	Interest Received	$G_{10,3}$
13	Gross Value of P&M	$C_{3,3} + C_{3,4} + C_{3,5} - C_{3,6}$
14	Value of Products & By-products	$\sum_{i>0, i \# 12} J_{i,13} + G_{2,3} + G_{4,3}$
15	Total Output	$14 + G_{1,3} + G_{3,3} + G_{6,3} + G_{11,3}$
16	Fuels consumed	$H_{16,6} + H_{17,6} + H_{18,6} + H_{19,6} + H_{20,6}$
17	Materials consumed	$\sum_{i=1}^{11} H_{i,6} + \sum_{i>24} H_{i,6} + H_{13,6} + H_{14,6} + H_{21,6} + \sum_{i>0, i \# 7} I_{i,6}$
18	Total Input	$16 + 17 + F_{1,3} + F_{2(i),3} + F_{2(ii),3} + F_{3,3} + F_{4,3} + F_{5,3} + F_{6,3} + F_{11,3}$
19	GVA	$15 - 18$
20	Depreciation	$\sum_{i=1}^9 C_{i,9}$ For $i \# 8$
21	NVA	$19 - 20$
22	Net Fixed Capital Formation (NFCF)	$\sum_{i=1}^9 (C_{i,13} - C_{i,12} - C_{i,4})$ For $i \# 8$
23	Gross Fixed Capital Formation (GFCF)	$22 + 20$
24	Addition in stock of:	
	(a) Materials, Fuels Etc.	$\sum_{i=1}^3 (D_{i,4} - D_{i,3})$
	(b) Semi-Finished Goods	$(D_{5,4} - D_{5,3})$
	(c) Finished Goods	$(D_{6,4} - D_{6,3})$
	(d) Total	$(a) + (b) + (c)$
25	Gross Capital Formation	$23 + 24(d)$
26	Net income	$21 - (F_{8,3} + F_{9,3} + F_{10,3}) + (G_{8,3} + G_{9,3} + G_{10,3})$
27	Profit	$26 - \sum_{i=1, i \# 3, 5}^7 E_{i,8} - E_{10,8} - (E_{11,8} + E_{12,8})$

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**Flow Chart for Tabulation Program**

**Volume – I (Table – 3 & 4)**

Srl.	Description	Formula
A	<b>Average no. of persons engaged</b>	$\sum_{i=1, i \neq 3, 5}^8 E_{i,6}$
1	Workers	$E_{1,6} + E_{2,6} + E_{4,6}$
1.1	Directly employed	$E_{1,6} + E_{2,6}$
1.1.1	Men	$E_{1,6}$
1.1.2	Women	$E_{2,6}$
1.2	Employed through Contractors	$E_{4,6}$
2	<b>Employees other than worker</b>	$E_{6,6} + E_{7,6}$
2.1	Supervisory & Managerial Staff	$E_{6,6}$
2.2	Other employees	$E_{7,6}$
3	Unpaid family members/proprietor etc.	$E_{8,6}$
B	Man-days employed, Total	$\sum_{i=1, i \neq 3, 5}^7 E_{i,5}$
C	Wages & Salaries, Employer's Contribution	1 + 2 (As defined below)
1	Wages & Salaries including Bonus	1.1 + 1.2 (As defined below)
1.1	Wages & Salaries	1.1.1 + 1.1.2 + 1.1.3 (As defined below)
1.1.1	Workers	$E_{1,8} + E_{2,8} + E_{4,8}$
1.1.2	Supervisory & Managerial Staff	$E_{6,8}$
1.1.3	Other Employees	$E_{7,8}$
1.2	Bonus to all Staff	$E_{10,8}$
2	Employer's Contribution etc.	$E_{11,8} + E_{12,8}$
<b>Volume – I (Table – 5 &amp; 6) Fuels Consumed</b>		
1	Coal Consumed	H18, 6
2	Electricity Purchased	H16, 6
3	Petroleum Products	H17, 6
4	Gas Consumed	H19, 6
5	Other Fuels	H20, 6

**Remarks:**

- Alphabets in italics under the 'Formula' column represent the block codes used in the schedule
- Unless otherwise mentioned, the symbols are of the form  $\langle \text{Block Row, Column} \rangle$ . For example  $E_{8,7}$  represents Row with serial number 8 and column number 7 of Block E.
- 'No. of factories' in Volume I (Table 1&2) are calculated for A12 = 1, 2, 3, 4, 6, 9.**
- All other parameters in Volume I are calculated for A12=1, 2, 3.**
- For calculation of closing values 'Addition due to revaluation' (Column 4 of Block C) has not been considered.
- For calculating 'Gross Value of Plant & Machinery' in Volume I (Table 1&2)  $C_{3,7}$  has been used in place of  $C_{3,3} + C_{3,4} + C_{3,5} - C_{3,6}$  because of non-availability of information in the schedule.
- For calculating 'Man-days employed, Total' in Volume I (Table 3&4),  $E_{9,5}$  has been used in place of  $\sum_{i=1, i \neq 3, 5}^7 E_{i,5}$  because of non-availability of constituent items in the schedule.

### **Note for users on status code for Unit Level data for ASI 2012-13**

Prior to ASI 2010-11, separate procedure was followed for estimating the 'number of factories in operation'. The units with the status code '1' (i.e., open) only were considered as surveyed cases for estimating the 'number of factories in operation' earlier. It may be noted that the samples are always drawn from the ASI frame, containing units with status codes '1'(open), '2'(closed) and '3'(NOP) – the reason being that these are considered as the live units in the domain and some have operated during the reference period, and some others have continued to produce in the past, but for certain reasons did not operate/produce during the reference period but exists with all assets, employment etc. and may start producing any moment. In all these cases, the units are considered as 'surveyed', if essential information (i.e. **A, B, C, E block for Closed units and A, B, C block for NOP units**) is collected, else they are treated as 'Non-reported' or 'casualty'.

From ASI 2010-11 onwards units with status code '1','2','3' were being considered for estimating the 'number of factories in operation'. However, while disseminating unit level data for ASI 2010-11 and 2011-12 , CSO(ISW) **used to mark all such cases with status code '1','2','3' as open (code '1')**. But with the introduction of ASI Web Portal for compilation of ASI data from 2012-13 onwards, it has been possible to introduce the validation of the status code wise essential information, as mentioned above, for closed and NOP units at data entry stage itself. **That is why it has been possible to provide status code '2','3' for ASI 2012-13 in addition to code'1'**.

It may be noted that estimation for all the parameters are based on the status codes 1,2,3, except for no. of factories which is based on status codes 1,2,3,4,6,9.