

Sample of the 2010 Worldwide Industrial / Commercial Construction Schedule of Rates Yearbook

Table of Contents

Division Number	Description	Number of Pages
Division 0	<p>Introduction and Calibration Factors: includes the following:</p> <ul style="list-style-type: none"> • Location (Calibration) Factors - International values compared to Washington D.C. (Base of 1.00). Calibrations in this application are used to adjust the unit prices / schedule of rated depicted in the following Divisions 1 – 17. • 134 # International Location / Calibration Factors • General Conversion Values - Imperial to Metric Units • Import Duties General Sales Tax / Value Added Tax / Consumption Tax • 236 # USA / Canada Location Factors • Detailed Design / Engineering / Architectural and CM Fees 51 # Facility Types • Union Labor Costs • USA and Canada State & Province Sales Tax / GST • Inflation Cost Indexes 	1 -34
Division 00	<p>Cost Models / Cost Benchmarks (12 Number) includes cost and quantity data on the following:</p> <ul style="list-style-type: none"> • Power Station Cost Model • Crude Oil Distillation Complex • High Rise Apartment Building Cost Model • Waste Water Treatment Cost Model • EPCM Home Office Billing Rate Sheet • Consumer Products Facility • Steel Production Cost Model • Beverage Production Facility Cost Model • Petro – Chemical Cost Model • 78 # Engineering / Construction Cost Benchmarks 	1 - 20
Division 1	<p>General Requirements / General Conditions / Preliminaries: includes cost data on the following:</p> <ul style="list-style-type: none"> • Rules of thumb • Insurance costs • Protection of completed work • Scaffolding • Temporary Utilities, Structures & Fences: • Permits • Testing / Inspection • Surveys • Bonds 	1 - 13

	<ul style="list-style-type: none"> • Site Staff / field Personnel • Construction Equipment Costs / Rental • Temporary Construction items 	
Division 2	Site Construction: includes schedule of rates for: <ul style="list-style-type: none"> • Demolition (including asbestos) • Excavation • Rock removal • Hardcore / Stone • Shoring • Planking & Strutting / Sheet Piling • Foundation Piling • Utilities • Miscellaneous Site Improvements • Paving • Concrete curbing • Fencing • Site Lighting • Marine work • Underground Storage tanks 	1 - 16
Division 3	Concrete Work: includes schedule of rates for: <ul style="list-style-type: none"> • Concrete • Formwork • Reinforcement • Precast Concrete • Grouting 	1 - 10
Division 4	Masonry: includes schedule of rates for: <ul style="list-style-type: none"> • Brickwork • Masonry • Refractory 	1 - 6
Division 5	Metals: includes schedule of rates for: <ul style="list-style-type: none"> • Structural Steel • Metal Joists • Metal Framing • Miscellaneous Iron • Metal Decking 	1 - 11
Division 6	Wood and Plastics: includes schedule of rates for: <ul style="list-style-type: none"> • Rough Carpentry • Finish Carpentry • Carpentry Specialties 	1 - 8
Division 7	Thermal and Moisture Protection: includes schedule of rates for: <ul style="list-style-type: none"> • Damp proofing and Waterproofing • Thermal Protection • Roofing Systems • Caulking & Sealants 	1 - 12
Division 8	Doors and Windows: includes schedule of rates for: <ul style="list-style-type: none"> • Wood and Plastic Doors • Metal Doors and Frames 	1 - 8

	<ul style="list-style-type: none"> • Windows • Glazing / Glazed Curtain Walls • Hardware 	
Division 9	Finishes: includes schedule of rates for: <ul style="list-style-type: none"> • Plaster and Gypsum Board • Tile • Terrazzo • Ceilings • Flooring • Wall Finishes • Acoustical Treatment • Paints and Coatings 	1 - 12
Division 10	Specialties: includes schedule of rates for: <ul style="list-style-type: none"> • Visual Display Boards • Compartments and Cubicles • Louvers and Vents • Wall and Corner Guards • Miscellaneous Facility Specialties 	1 - 7
Division 11	Equipment: includes schedule of rates for: <ul style="list-style-type: none"> • Maintenance Equipment • Loading Dock Equipment • Industrial and Process Equipment • Laboratory Equipment • Material Handling Equipment 	1 - 11
Division 12	Furnishings: includes schedule of rates for: <ul style="list-style-type: none"> • Furniture • Manufactured Casework 	1 - 4
Division 13	Special Construction: includes schedule of rates for: <ul style="list-style-type: none"> • Pre-Engineered Buildings & Structures • Radiation Protection • Storage Tanks • Security Access and Surveillance 	1 - 7
Division 14	Conveying Systems: includes schedule of rates for: <ul style="list-style-type: none"> • Elevators • Escalators and Moving Walks • Hoists and Cranes 	1 - 7
Division 15	Mechanical: includes <ul style="list-style-type: none"> • Building Services Piping • Plumbing Fixtures • Process Piping • Fire Protection Piping • Heating, Ventilating & Air Conditioning Equipment • Ductwork • Insulation 	1 - 52
Division 16	Electrical: includes schedule of rates for: <ul style="list-style-type: none"> • Electrical Equipment / Transformers • Cable / Control wire • Conduit 	1 - 31

	<ul style="list-style-type: none"> • Cable tray • Communications • Instrumentation and Controls 	
Division 17	Process Equipment / Major Equipment: includes schedule of rates for: <ul style="list-style-type: none"> • Agitators • Air Handlers • Boilers • Chillers • Compressors • Condensers • Conveyors • Cooling Towers • Ductwork • Heat Exchangers • Pumps • Tanks 	1 - 38

Sample from Division 0 (note values have been purposely been removed)

Location (Calibration) Factors - International values compared to Washington D.C. (Base of 1.00). Calibrations in this application are used to adjust the unit prices / schedule of rates depicted in the following Divisions 1 – 17.

Location Factor A: is applicable to Refineries, Chemical Plants, Mine and Smelter type facilities, Steel Mills, Automobile production and similar Manufacturing facilities, Power Stations, Wind Power facilities, Hi -Tech Type Buildings (Pharmaceutical / Chip Manufacturing Facilities), these facilities typically contain sophisticated manufacturing / production equipment. In addition, they require complex piping / air conditioning systems, together with highly sophisticated automated instrumentation / control and building management systems, many times these complex equipment items / materials and instrumentation requirements need to be procured and imported from North America, Europe or Japan / South Korea into the host country, these CAPEX projects typically are burdened with import duties, tariffs and ocean freight costs.

Location Factor B: this factor is germane to less sophisticated construction projects such as schools, hospitals, office buildings, hotels, shopping malls, roads, bridges, airports, marine works (jetties / piers) and warehouses, were there is a high percentage of locally manufactured materials incorporated into the final facility (and there is a limited or no need for imported production / manufacturing equipment and their associated automated control systems).

#	Country	City	Location Factor A	Location Factor B
1	Afghanistan			
2	Albania			
3	Algeria			
4	Angola			
5	Argentina			
6	Armenia			

Table contains 134 # International Location / Calibration Factors

Sample of Data contained in Division 00 Page 8 (note values have been purposely removed)

**(6) Consumer Products Facility Personal Care Products - XXXXX:
(Soap, Shampoo and Dental Hygiene Products)**

**Production 21,500 M2 - Admin / Laboratory 5,700 M2 - Warehouse - 10,500 M2
2009 Cost Basis:**

Construction Category	\$	M2	\$/M2	SF	\$/SF
General Conditions / Preliminaries	5,269,900	37,700		405,652	
Building foundations / piling	3,691,300	37,700		405,652	
Buildings (Superstructure) Slab on grade, Structural steel, Wall Panels and Roof	24,467,700	37,700		405,652	
Internal construction (walls, ceilings, floors)		37,700		405,652	
New production equipment		37,700		405,652	
Packaging equipment / wrappers / carton robots / conveyors		37,700		405,652	18.87
Mixers / Blender skids		37,700	36.12	405,652	3.36
Equipment relocation (From existing facility)		37,700		405,652	3.80
Piping		37,700		405,652	19.61
Fire protection	828,000	37,700	21.96	405,652	2.04
Electrical work		37,700		405,652	16.47
HVAC / AHU - Ductwork		37,700		405,652	15.19
Instruments / Building Automation / I-C integration		37,700		405,652	
Under slab guide wire		37,700		405,652	
Bar coding equipment		37,700		405,652	
Insulation	827,850	37,700		405,652	
Painting	793,925	37,700		405,652	
Start up spare parts	286,900	37,700	7.61	405,652	0.71
Sub Total		37,700		405,652	
Construction Management plus CM General Conditions		37,700	152.30	405,652	
Front End Studies / Concept report		37,700		405,652	
Detail Design Work		37,700		405,652	
Vendor Start up assistance		37,700		405,652	
Commissioning start up activities		37,700	12.27	405,652	

Owner Engineering / Consultants		37,700	23.70	405,652	
IT / Communications / Telephones	794,485	37,700	21.07	405,652	
Sub Total					
Facility Total		37,700			
Demo / Incoming Roads / Site Works - 45 Acres	1,340,000				
Utility Building / Tanks					
Landscaping - signs					
Rail spur					
Maintenance shop c/w tools					
Fire water pond					
Fire water loop					
Emergency Generator & Fuel Tank					
Lunch patio c/w furniture / benches					
Truck scales					
Fencing					
Guard House					
Fire house & engine					
Land Purchase and adjoining 25 acres					
Fork Lifts / Battery Charging	475,000				
Storage high bay racks	470,000				
Facility Spare Parts	1,445,000				
Office / Cafeteria Furniture	590,000				
Computers / Network	740,000				
Sub Total		37,700		405,652	
Project Total					

Sample of Data contained in Division 4 Page 5 (note values have been purposely removed)

Brick and Block Treatments						
164	Cut out and repoint block work	SF	0.25	1.24	0.06	1.55
165	Cut out existing caulking and replace with new, (all caulking materials) (Maximum)	LF	2.15	3.35	0.17	5.67
166	Ditto (Minimum)	LF	1.05	1.75	0.09	2.89
167	Cut out and replace existing bricks and replace with new (Maximum)	SF	14.50	12.50	1.88	28.88
168	Ditto (Minimum)	SF	6.50	7.50	1.13	15.13
Labor Adjustments						

169	800 - 1,200 bricks installed per 8 hour day by a bricklayer is considered the norm in construction US construction industry	1,000				
170	Laying bricks overhand (from inside building) add 15% - 25% to labor cost	SF				
171	Circular work (add 20% to material cost and 25% - 30% to labor cost	SF				
172	Add 10% - 20% to labor costs for projects with above average number of doors / windows / jambs / reveals	SF				

Sample of Data contained in Division 15 Page 1 (note values have been purposely removed)

	2010 Division 15 - Mechanical Work - Union	Unit of Measure	Material	Labor	Constr Equip	Total
	Demolition					
1	Remove metal piping from building / facility n/e 2" dia (Maximum)	LF	-	3.50	0.26	3.76
2	Ditto (Minimum)	LF	-	1.25	0.09	1.34
3	3" - 4" dia ditto (Maximum)	LF	-			
4	Ditto (Minimum)	LF	-			
5	6" - 8" dia ditto (Maximum)	LF	-			
6	Ditto (Minimum)	LF	-			
7	10" - 12" dia ditto (Maximum)	LF	-			
8	Ditto (Minimum)	LF	-			
9	Remove metal duct work (Maximum)	POUND	-	5.00	0.38	5.38
10	Ditto (Minimum)	POUND	-	2.15	0.16	2.31
11	Remove assorted mechanical equipment (Maximum)	TON	-			
12	Ditto (Minimum)	TON	-			
	Scrap metal prices for various metals					
13	Structural steel (Maximum)	TON	-			
14	Ditto (Minimum)	TON	-			
15	Metal duct work - Galv steel (Maximum)	TON	-			
16	Ditto (Minimum)	TON	-			
17	Copper (Maximum)	TON	-			
18	Ditto (Minimum)	TON	-			
19	Lead (Maximum)	TON	-			
20	Ditto (Minimum)	TON	-			
	Material Only Costs					
21	CS 1" dia A 106 sch 80	LF				\$XXX / LF
22	Ditto 2" dia	LF				\$XXX / LF
23	Ditto 3" dia A 53 sch 40	LF				\$XXX / LF

24	Ditto 4" dia	LF				\$XXX / LF
25	Ditto 6" dia	LF				\$XXX / LF
26	Ditto 8" dia	LF				\$XXX / LF
27	SS - 304 L - 2" dia	LF				\$XXX / LF

Sample of Data contained in Division 17 (note values have been purposely removed)

	2010 Division 17 - Major Equipment - Union	Unit	Material	Labor	Constr Equip	Total
	Agitators					
1	Agitator / H.D. mixer direct drive clamp mounted 1 HP 230 v TEFC Explosion proof motor stainless steel 3/4" dia shaft 60" long with 2 # 6" propellers	EACH				
2	Agitator / H.D. mixer direct drive clamp mounted 2 HP 230 v TEFC Explosion proof motor stainless steel 3/4" dia shaft 60" long with 2 # 6" propellers	EACH				
3	Agitator / H.D. mixer direct drive clamp mounted 3 HP 230 v TEFC Explosion proof motor stainless steel 3/4" dia shaft 60" long with 2 # 6" propellers	EACH				
4	Agitator / H.D. mixer gear driven clamp mounted 1 HP 230 v TEFC Explosion proof motor stainless steel 3/4" dia shaft 60" long with 2 # 6" propellers	EACH				
5	Agitator / H.D. mixer gear driven clamp mounted 2 HP 230 v TEFC Explosion proof motor stainless steel 3/4" dia shaft 60" long with 2 # 6" propellers	EACH				
6	Agitator / H.D. mixer gear driven clamp mounted 3 HP 230 v TEFC Explosion proof motor stainless steel 3/4" dia shaft 60" long with 2 # 6" propellers	EACH				
7	Agitator - including shaft / propeller / motor - top entry C.S. 1 HP (Maximum)	EACH				

End of Samples