



FÉDÉRATION EUROPÉENNE DE LA MANUTENTION COMITÉ NACIONAL ESPAÑOL

FEM-AEM
Asociación Española de Manutención



Documentos publicados por la FEM

- I.- Aparatos pesados de elevación y manutención.
- II.- Equipos de manutención continua.
- IV.- Carretillas de manutención.
- V.- Grúas móviles.
- VII.- Ascensores, escaleras y aceras móviles.
- IX.- Aparatos de serie para elevación.
- X.- Equipos y métodos de almacenaje.

FEM-AEM

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SECCION I : EQUIPAMIENTO DE ELEVACIÓN Y MANUTENCIÓN

Equivalente	Ref.	Año		PVP <i>en €</i>
UNE	FEM			
	1.001	98	Rules for the design of hoisting appliances, booklets 1/8	149,00
58132-1		98	1 Object and scope	
“ -3		98	2 Classification and loading on structures and mechanisms	
“ -3		98	3 Calculating the stresses in structures	
“ -2 y 4		98	4 Checking for fatigue and choice of mechanism components	
“ -5		98	5 Electrical equipment (Rev. 1992-10-01)	
58131		98	7 Safety rules	
58132-6		98	8 Test loads and tolerances	
		98	9 Supplements and comments to booklets 1 to 8	
<p style="text-align: center;"> ↑ ↓ </p>				
Los opúsculos no se venden por separado, salvo el 5º Rev. 1992 10.01				
	1.002	83	Illustrated terminology of heavy lifting equipment	79,00
	1.003	95	Tower cranes - Graphical Symbols	23,00
	1.004	00/07	Recommendation for the calculation of wind loads on crane structures	46,00
	1.005	03/11	Recommandations for the calculation of tower cranes structures in out of service conditions	74,50
	1.007	03/11	Recommandations to maintain tower cranes in safe conditions	17,20

SECCION II: EQUIPAMIENTO DE MANUTENCIÓN CONTÍNUA

UNE	FEM	Año		€
BULK PRODUCTS				
58200- 1 y 2	2.111	78/07	Illustrated terminology - Mechanical handling of bulk material	21,80
“	2.311	82/03	Storage of bulk materials - Terminology	14,50
“	2.411	78/07	Illustrated terminology- Pneumatic handling of bulk material	13,80
“	2.412	81	Glossary of general terms used in pneumatic handling of loose bulk material	13,80
<i>Rules for the design</i>				
	2.121	75/09	Screw conveyors for bulk materials Recommendation for the design	13,80

UNE	FEM	Año		€
	2.122	81/01	Recommendation for the calculation of throughput, power requirement and tensile forces in belts and chains of vertical bucket elevators	13,80
	2.131	97	Rules for the design of mobile equipment for continuous	
	+2.132		handling of bulk materials	173,65
	2.371	91/11	Definition of flow processes and troubles in the operation of storage silos	26,30
	2.461	83	Guarantee terms for pneumatic handling installations	5,20
	2.561	94/04	Questionnaire for the study of continuous bulk handling systems Problems common to mechanical handling, pneumatic handling and silo storage	16,00
	2.562	94/04	Questionnaire and check-list for the study of continuous bulk handling systems - Mechanical handling	16,00
	2.563	94/04	Questionnaire and check-list for the study of continuous bulk handling systems - Pneumatic handling	16,00
	2.564	94/04	Questionnaire and check-list for the study of continuous bulk handling systems – Silos, hoppers and bins	14,60
	2.551		Pressure release of dust explosions	0
	2.521	95/07	Apron conveyors. Design principles	26,40
	2.581 + 2.582	91/11	General characteristics of bulk products with regard to their classification and their symbolisation	26,40
	2.181	89	<i>Specific characteristics of bulk products as applicable to</i> - Mechanical handling	21,80
	2.381	86/02	- Storage in silos	32,10
	2.481	95/07	- Pneumatic handling	32,10
	2.482	99/11	Methodes de mesure des fines et des filaments contenus dans les granules de matieres plastiques	28,70
			<i>Influence of the characteristics of bulk materials on the design of</i>	
	2.123	89	- Bucket elevators	21,80
	2.124	89	- Troughed belt conveyors	21,80
	2.125	89	- Horizontal and slightly inclined screw conveyors	21,80
	2.126	89	- En-masse conveyors/elevators	21,80
	2.127	89	- Vibrating conveyors	21,80
	2.128	89	- Bucket-wheel reclaimers	21,80
	2.312	95	Discharge of bulk materials from silos – Description and assessment of discharge systems	26,40

UNE	FEM	Año		€
2.321	89/05	- Silos		21,80
2.421	92/01	- Pneumatic handling systems		21,80
UNIT LOADS				
2.211	78/07	Illustrated terminology - Mechanical handling of unit loads		21,80
<i>Description of unit loads</i>				
2.271	81/01	Cardboard and millboard boxes		13,80
2.272	82/10	Plastic boxes		13,80
2.273	83	Flat pallets		13,80
2.274	85	Paper, canvas and plastic bags		13,80
2.275	85	Steel and plastic drums		13,80
2.276	85	Luggage		13,80

SECCION III: ROPEWAYS Dirigirse a la O.I.T.A.F. www.oitaf.org Via Padovan, 27 I-00161 Roma

SECCION IV: INDUSTRIAL TRUCKS

UNE	FEM	Año		€
<i>Stability tests</i>				
4.001 d	80	High and medium lift order picking trucks		18,20
4.001 e	85	Single side loading fork lift trucks		7,40
4.001 g	85	High lift lateral (and front) stacking trucks		19,50
4.001 h	85	Bi-directional and multi-directional trucks		19,50
4.002	99	Operator Restraint Systems Specification ant Test Procedure		9,20
4.004	04	Periodic Inspection of Industrial Trucks		13,00
4.007 b	93	Connectors for traction batteries up to and including 96 V		4,60
4.007 c	80	Dimensions of traction battery cells		4,60

UNE	FEM	Año		€
	4.007 f	84	Regulations governing the electrical equipment of industrial trucks with Nominal Voltages in excess of 96 volts	9,20
			<i>Symbols</i>	
	4.006	81	Symboles pour la manutention des conteneurs de frêt	6,20
	4.007 e	82	Motors for battery operated industrial trucks	12,70
			<i>Technical notes</i>	
	TN01	83	90° stacking aisles	7,30
	TN02	83	Method for specifying wheel/tyre static ground contact pressure and ground contact area	4,60
	4.051	92	Castors for furniture	17,00
	4.052	92	Castors and wheels for Industrial application	17,00
	4.053	92	Castors and wheels for hospital beds	17,00
	4.054	92	Castors and wheels for manually propelled or towed applications up to 1.1 m/s	17,00
	4.055	92	Castors and wheels for applications over to 1.1.m/s (4 km/h)	17,00

SECCION V: MOBILE CRANES

UNE	FEM	Año		€
58.536	5.004	94	Rules for the design of the steel structures of general use mobile cranes	8,00
			<i>Lorry loaders</i>	
	5.005	86/06	Definition, terminology and configurations	6.90
	5.006	86/06	Controls, general principles, symbols, layout, operating directions	8,00
	5.007	86/06	Stability, calculation and test loading	8,00
	5.008	87/12	Stability, Lorry loaders used in timber handling	8,00
	5.010	87/10	Load plates	3,50
	5.011	87/10	Safety requirements for hydraulic systems	4,60
	5.012	87/05	Devices against overloading	7,70
	5.013	87/04	Wire ropes, drum and sheave diameters	8,00
	5.015	90	Lorry loaders: classification, loads and load combinations	8,00

Antigua SECCION VII: LIFTS, ESCALATORS AND PASSENGER CONVEYORS

<i>UNE</i>	<i>FEM</i>	<i>Año</i>		€
58.701		84	Terminology for lifts, escalators and passenger conveyors	Consultar
	7.001	67/11	Conditions for the supply and erection of lift installations	11,50
	7.002	73/09	Draft contract for comprehensive maintenance	11,50
	7.003	79/06	Model conditions for the supply and installation of escalators and passenger conveyors	11,50
	7.004	83/07	Conditions of contract for minor works	11,50

SECCION IX: SERIES LIFTING EQUIPMENT

<i>UNE</i>	<i>FEM</i>	<i>Año</i>		€
			<i>Terminology</i>	
	9.001	82/02	Terminology; Dictionary S/R - machines	15,30
58.916:1994	9.101	79/07	Terminology ; Storage and retrieval (S/R) machines – Definitions	12,60
	9.223	03	Basic data and criteria for the construction of automatic high bay warehouses with distribution systems	19,50
			<i>Rules for the design of series lifting equipment</i>	
58.915-1	9.341	83/10	Local girder stresses	5,70
58.915-2	9.511	86/06	Classification of mechanisms	4,60
58.915-3	9.661	86/06	Dimensions and design of rope reeving components	4,60
58915-4	9.671	88/10	Chain qualities, selection criteria and requirements	5,80
58915-5	9.681	86/06	Selection of travel motors	15,10
58915-6	9.682	86/06	Selection of lifting motors	15,10
	9.752	03	Series hoists mechanisms with adjustable speed electrical power drive systems – Low voltage adjustable frequency AC power drive systems	28,70
	9.756	04	Hand-operated and power driven hoist for special puerposes	55,00
58.915-7	9.811	91/12	Specification of electric hoists	Anulada : Ver 9751:98
	9.901		Rules for the design of series lifting equipment and cranes equipped with series lifting equipment	11,50

UNE	FEM	Año		€
58.915-8	9.941	95/01	Control symbols	6,70
			<i>Rules for the design of storage and retrieval machines</i>	
58.917	9.311	78/02	Structures	5,70
58.914	9.512	97/07	Mechanisms	9,20
58.911	9.831	95/02	Tolerances and clearances in high-bay storage	18,50
			<i>Performance data of storage and retrieval machines</i>	
	9.832	01/08	Basis of calculation for S/R machines, tolerances, deformations and clearances in automatic small parts warehouses (not silos design)	27,50
58.912	9.851	78/08	Cycle times.	17,20
58.913	9.221	81/10	Reliability - Availability	5,70
	9.222	97/03	Standards of the acceptance and availability of installations with storage/retrieval machines and other machinery	6,90
UNE-EN 528	9.753	88/05	Safety rules for storage and retrieval machines	17,60
	9.754	88/04	Safety rules for automatic miniload storage and retrieval machines	4,60
58.919	9.755	93/06	Measures for achieving safe working periods for motorised serial hoist units (S.W.P)	27,60
	9.756	04/08	Hand-operated and power driven hoists for special purposes	55,00
58.920	9.761	95/01	Lift force limiters for controlling the loading of motorized series hoist mechanisms.	11,50
	9.683	95/10	Series lifting equipment – Selection of lifting and travel motors	32,80
	9.871	97/08	Retrieval Machines and Transfer Devices.	14,90
	9.751	98/05	Power driven series hoist mechanisms-Safety	23,00
	9.852	98/07	Power driven series hoist mechanisms-Standardised test procedure for verification of the classification	11,50
	9.881	2000/02	Project Planning Data for Selection of Drivers for Storage Retrieval Machines	9,20

SECCION X: STORAGE EQUIPMENT AND METHODS

<i>UNE</i>	<i>FEM</i>	<i>Año</i>		€
	10.2.02	2001	Design of static racking & design example	230,00
	10.2.03	2000	Guidelines for specifier's of static steel racking and shelving	115,00
	10.2.04	2001	Guidelines for the safe use of static steel racking and shelving	115,00
	10.2.06	2001	The design of hand loaded static steel shelving systems	230,00
	10.3.01	1996	Adjustable beam pallet racking (APR)- Tolerances-Deformations & clearances	115,00

ANEXO

NOTAS PARA LA LECTURA DEL DOCUMENTO:

UNE: Referencia UNE de los documentos FEM transpuestos a normas UNE por AENOR

FEM: Referencia del documento

Año: Año de publicación de la última versión del documento FEM

