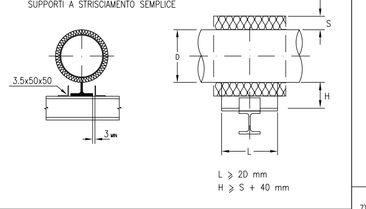
SUPPORTI PER TUBAZIONI ACQUA CALDA

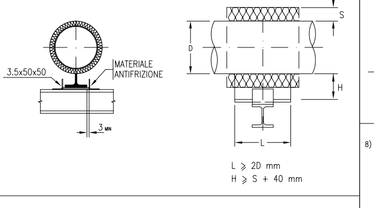
CIRCUITI ACQUA CALDA

1) SUPPORTI A STRISCIAMENTO SEMPLICE
2) SUPPORTI A STRISCIAMENTO AD ATTRITO RIDOTTO
3) SUPPORTI A ROTOLAMENTO CON VINCOLI DI MOVIMENTO TRASVERSALE
4) SUPPORTI A ROTOLAMENTO SENZA VINCOLI DI MOVIMENTO TRASVERSALE
5) SUPPORTI A PENDOLO SEMPLICE – TUBI SINO A DN 50
6) SUPPORTI A PENDOLO SEMPLICE – TUBI DA DN 65 SINO DN 200
7) SUPPORTO CON STAFFA A STRISCIAMENTO – TUBI SINO DN 80
8) SUPPORTO CON STAFFA A STRISCIAMENTO – TUBI DA DN 100 SINO DN 125
9) SUPPORTO CON ROTAIA DI SCORRIMENTO – TUBI DA DN 150 SINO DN 200
10) MONTANTI VERTICALI CON SLITTA DI SCORRIMENTO
11) MONTANTI VERTICALI CON STRISCIAMENTO SEMPLICE
12) MONTANTI VERTICALI CON RULLI
13) MONTANTI VERTICALI A CROCE CON RULLI

1) CIRCUITI ACQUA CALDA
SUPPORTI A STRISCIAMENTO SEMPLICE

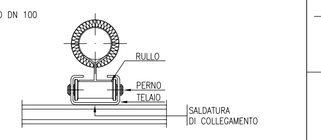


2) CIRCUITI ACQUA CALDA
SUPPORTI A STRISCIAMENTO AD ATTRITO RIDOTTO

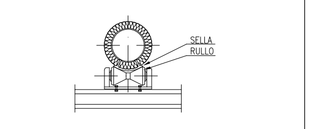


3) CIRCUITI ACQUA CALDA
SUPPORTI A ROTOLAMENTO CON VINCOLI DI MOVIMENTO TRASVERSALE

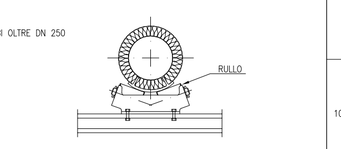
3A) TUBI SINO DN 100



3B) TUBI OLTRE DN 100 SINO DN 250

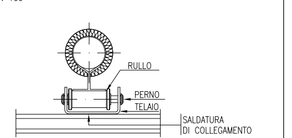


3C) TUBI OLTRE DN 250

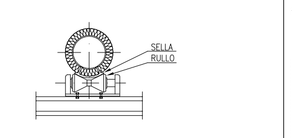


4) CIRCUITI ACQUA CALDA
SUPPORTI A ROTOLAMENTO SENZA VINCOLI DI MOVIMENTO TRASVERSALE

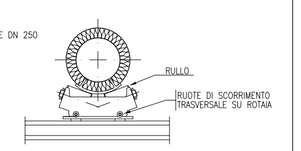
4A) TUBI SINO DN 100



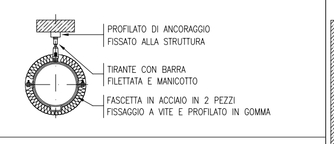
4B) TUBI OLTRE DN 100 SINO DN 250



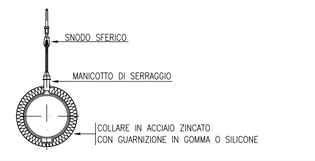
4C) TUBI OLTRE DN 250



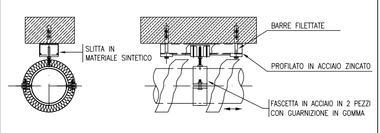
5) CIRCUITI ACQUA CALDA
SUPPORTO A PENDOLO SEMPLICE – TUBI SINO DN 50
DEFLESSIONE FINO 4°



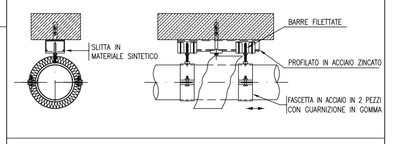
6) CIRCUITI ACQUA CALDA
SUPPORTO A PENDOLO SEMPLICE – TUBI DA DN 65 SINO DN 200
DEFLESSIONE SINO 4°



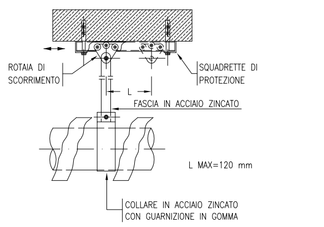
7) CIRCUITI ACQUA CALDA
SUPPORTO CON STAFFA A STRISCIAMENTO – TUBI SINO DN 80



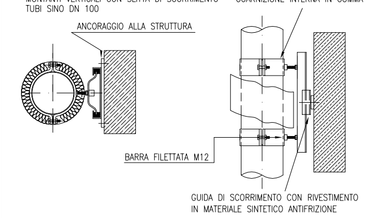
8) CIRCUITI ACQUA CALDA
SUPPORTO CON STAFFA A STRISCIAMENTO – TUBI DA DN 100 SINO DN 125



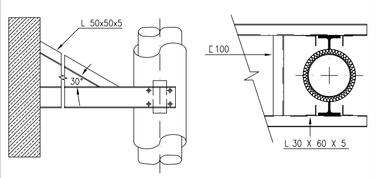
9) CIRCUITI ACQUA CALDA
SUPPORTO CON ROTAIA DI SCORRIMENTO
TUBI DA DN 150 SINO DN 200



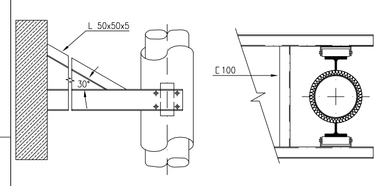
10) CIRCUITI ACQUA CALDA
MONTANTI VERTICALI CON SLITTA DI SCORRIMENTO
TUBI SINO DN 100



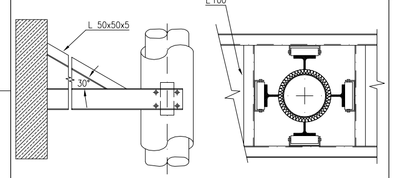
11) CIRCUITI ACQUA CALDA
MONTANTI VERTICALI A STRISCIAMENTO SEMPLICE



12) CIRCUITI ACQUA CALDA
MONTANTI VERTICALI CON RULLI



13) CIRCUITI ACQUA CALDA
MONTANTI VERTICALI A CROCE CON RULLI



SUPPORTI PER TUBAZIONI ACQUA REFRIGERATA

CIRCUITI ACQUA REFRIGERATA

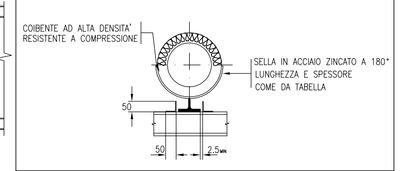
1 SUPPORTI A STRISCIAMENTO SEMPLICE
2 SUPPORTI A ROTOLAMENTO SENZA VINCOLO DI MOVIMENTO TRASVERSALE
3 SUPPORTI A ROTOLAMENTO CON VINCOLO DI MOVIMENTO TRASVERSALE
4 SUPPORTO A COLLARE CON SELLA DI SOSTEGNO
5 SUPPORTO A COLLARE PRECOIBENTATO
6 MONTANTE VERTICALE SCORREVOLE
7 MONTANTE VERTICALE FISSO

NOTA: SCELTA DELLE MODALITA' DI SUPPORTO DA EFFETTUARE IN RELAZIONE AI MOVIMENTI ED ALLE SOLLECITAZIONI AMMISSIBILI

TABELLA LUNGHEZZE E SPESSORI MINIMI SELLE DI SOSTEGNO TUBAZIONI ACQUA REFRIGERATA

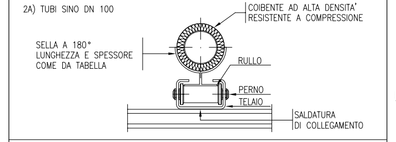
DIAMETRO TUBAZIONI (DIAMETRO NOMINALE)	LUNGHEZZA (mm)	SPESSORE (mm)
SINO DN 40	200	1.0
SINO DN 65	250	1.0
SINO DN 100	320	1.0
SINO DN 200	480	1.0
SINO DN 300	600	1.6
OLTRE DN 300	800	2.0

1) CIRCUITI ACQUA REFRIGERATA
SUPPORTI A STRISCIAMENTO SEMPLICE

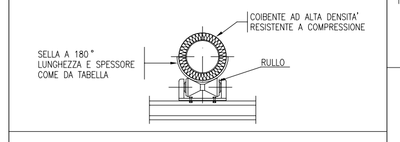


2) CIRCUITI ACQUA REFRIGERATA
SUPPORTI A ROTOLAMENTO CON VINCOLI DI MOVIMENTO TRASVERSALE

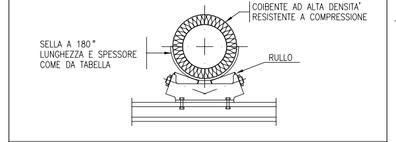
2A) TUBI SINO DN 100



2B) TUBI OLTRE DN 100 SINO DN 250

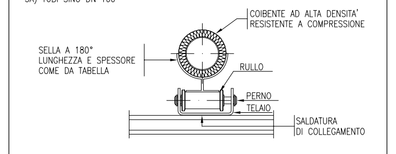


2C) TUBI OLTRE DN 250

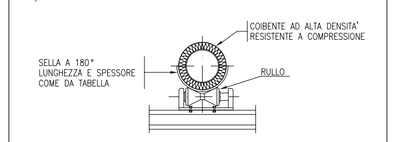


3) CIRCUITI ACQUA REFRIGERATA
SUPPORTI A ROTOLAMENTO SENZA VINCOLI DI MOVIMENTO TRASVERSALE

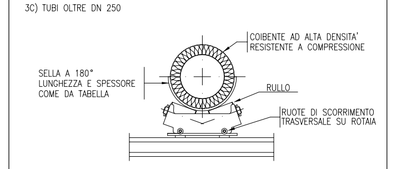
3A) TUBI SINO DN 100



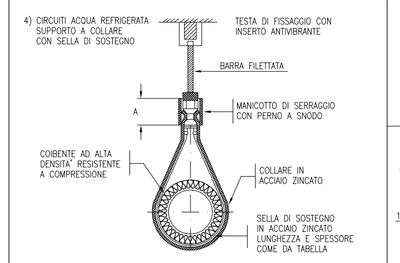
3B) TUBI OLTRE DN 100 SINO DN 250



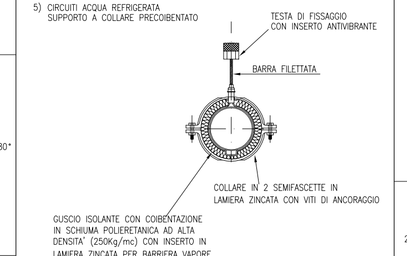
3C) TUBI OLTRE DN 250



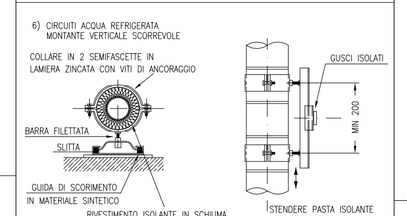
4) CIRCUITI ACQUA REFRIGERATA
SUPPORTO A COLLARE CON SELLA DI SOSTEGNO



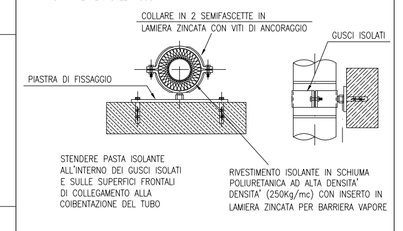
5) CIRCUITI ACQUA REFRIGERATA
SUPPORTO A COLLARE PRECOIBENTATO



6) CIRCUITI ACQUA REFRIGERATA
MONTANTE VERTICALE SCORREVOLE



7) CIRCUITI ACQUA REFRIGERATA
MONTANTE VERTICALE FISSO

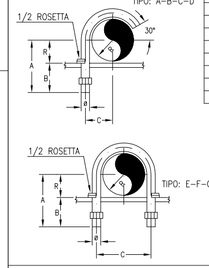


SUPPORTI PER TUBAZIONI NON COIBENTATI

CIRCUITI NON COIBENTATI

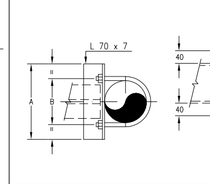
1 COLLARI DI SERRAGGIO
2 MONTANTI VERTICALI
3 APPOGGI ORIZZONTALI
4 SUPPORTI A PENDOLO

1) CIRCUITI NON COIBENTATI
COLLARI DI SERRAGGIO



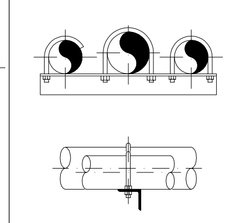
SERIE	DN LINEA	Ø	A	B	C	R
A	15	8	40	28	96	12
B	20		45	30	19	15
C	25		50	31	23	19
D	40		60	34	32	26
E	50	12	70	38	76	32
F	80		90	43	106	47
G	100		100	41	130	59
H	150	16	135	49	188	86
L	200		165	53	240	112
M	250		200	61	298	139

2) CIRCUITI NON COIBENTATI
MONTANTI VERTICALI



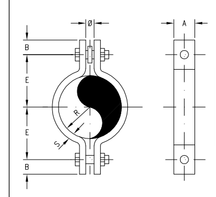
SERIE	DN LINEA	A	B
A	50	150	76
B	80	200	106
C	100	200	110
D	150	250	188
E	200	300	240

3) CIRCUITI NON COIBENTATI
APPOGGI ORIZZONTALI



TIPO	DN LINEA	PROFIL.
A	≤ 40	Ø 50x10
B	50÷300	100x10
C	400÷600	150x14

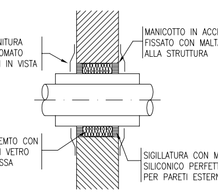
4) CIRCUITI NON COIBENTATI
SUPPORTI A PENDOLO



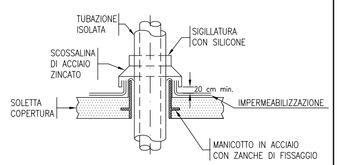
SERIE	DN LINEA	E	B	C	#	R	Ø/L
A	50	15					8/80
	80	20					8/80
	100	80	25	12	14	12	20x5
	150	110					M4
	200	135					110
	250	165					110

ATTRAVERSAMENTO PARETI ESTERNI O IN VISTA

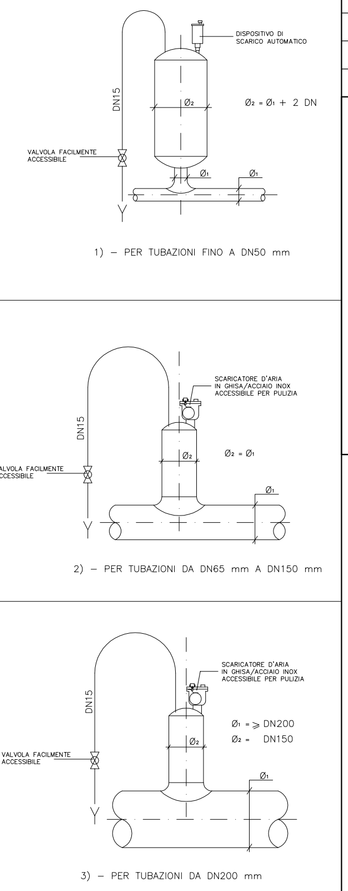
1) PARETI



2) SOLAI



DISPOSITIVI DI SFIATO DELL'ARIA



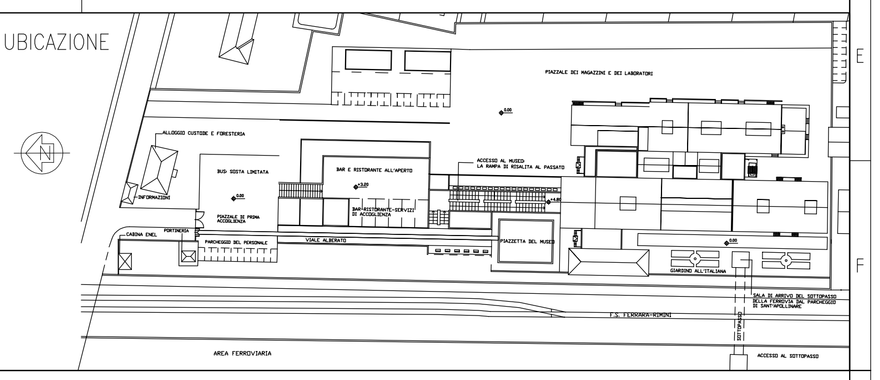
NOTE GENERALI

1. VALIDO SOLO PER L'IMPIANTO DI TERMOCONDIZIONAMENTO.
2. TUTTE LE DIMENSIONI SONO IN MILLIMETRI SALVO DIVERSAMENTE INDICATO.

LEGENDA

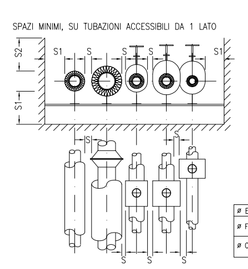
DISEGNI DI RIFERIMENTO

UBICAZIONE



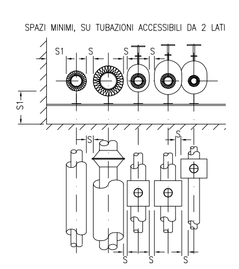
SUPPORTI PER TUBAZIONI – SPAZI MINIMI TRA TUBAZIONI COIBENTATE

SPAZI MINIMI, SU TUBAZIONI ACCESSIBILI DA 1 LATO



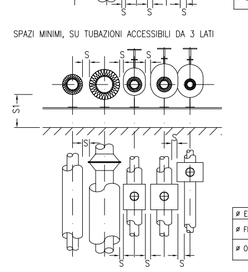
Ø ESTERNO ISOLAMENTO	S2	S1
Ø FINO A 200mm	≤300	50
	≥300	100
Ø OLTRE A 200mm	≤300	100
	≥300	150

SPAZI MINIMI, SU TUBAZIONI ACCESSIBILI DA 2 LATI



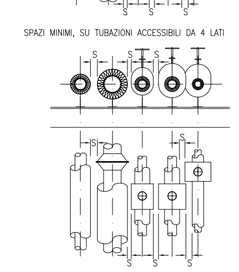
Ø ESTERNO ISOLAMENTO	S	S1
Ø FINO A 200mm	≤50	≥150
Ø OLTRE A 200mm	≥100	≥200

SPAZI MINIMI, SU TUBAZIONI ACCESSIBILI DA 3 LATI



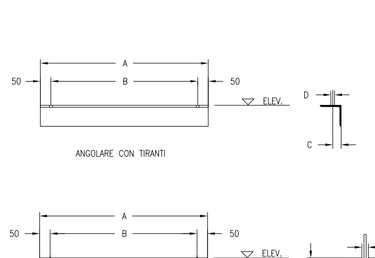
Ø ESTERNO ISOLAMENTO	S	S1
Ø FINO A 200mm	≤30	≥150
Ø OLTRE A 200mm	≥50	≥200

SPAZI MINIMI, SU TUBAZIONI ACCESSIBILI DA 4 LATI

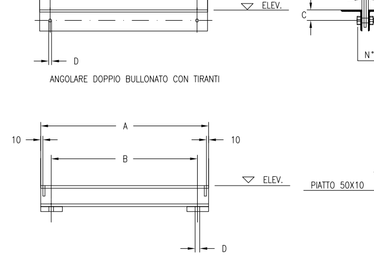


Ø ESTERNO ISOLAMENTO	S
Ø FINO A 200mm	≥30
Ø OLTRE A 200mm	≥50

SUPPORTI PER TUBAZIONI – DIMENSIONAMENTO PROFILATI DI SOSTEGNO

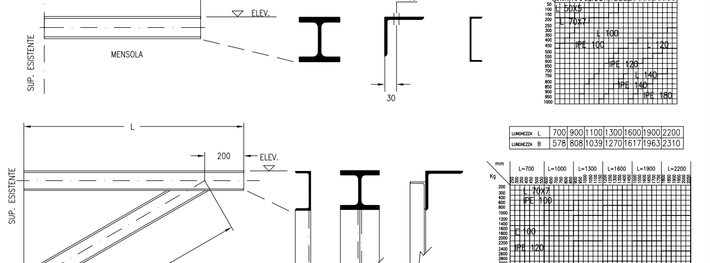


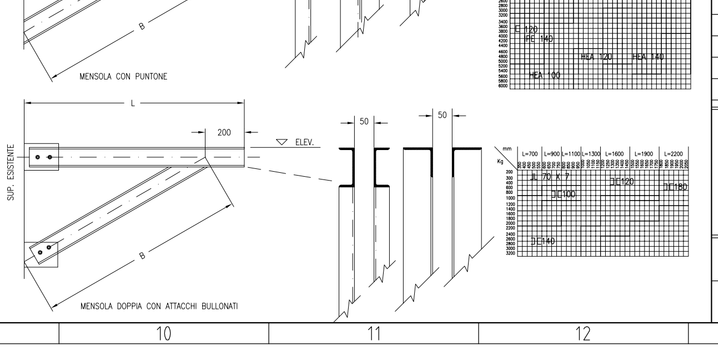
SERIE		A	B	C	D	CARICO MAX daN
A	L50X5	1	800	700	40	14	450
		2	900	800			300
		3	1100	1000			200
B	L70X7	1	900	800	40	18	1000
		2	1100	1000			800
		3	1300	1200			650



SERIE		A	B	C	D	CARICO MAX daN
A	L50X5	1	800	700	40	14	450
		2	800	700			300
		3	900	800			200
B	L70X7	1	900	800	40	18	800
		2	800	700			550
		3	1000	900			450

SERIE		A	C	B	D	CARICO MAX daN
C	C 80	1	1000	500	22	2800
		2	1100	1000		2500
		3	1200	1100		2000
		4	1400	1300		3000
D	C100	1	1600	1500	26	2600





COMUNE DI RAVENNA
AREA INFRASTRUTTURE CIVILI
SERVIZIO EDILIZIA

ISO 9001 BUREAU VERITAS Certification
Sistema di Qualità certificato per: Progettazione, programmazione, affidamento e direzione dei lavori pubblici e delle manutenzioni; gestione espropri.

RAVENNANTICA
Fondazione Parco Archeologico di Classe

MUSEO ARCHEOLOGICO DI CLASSE
Via Classense - RAVENNA

PROGETTO DEFINITIVO / ESECUTIVO

Restauro e adeguamento ex Zuccherificio di Classe - Museo di Classe
Realizzazione di LAbs Space: spazi di sperimentazione, laboratori didattici e di inclusione digitale

Segretario generale	Assessore ai LL.PP:	Sindaco:
Dott. PAOLO NERI	ROBERTO GIOVANNI FAGNANI	MICHELE DE PASCALE

Capo Servizio: Ing. CLAUDIO BONDI
Capo Area: Ing. MASSIMO CAMPRINI

Firme:

RESPONSABILE UNICO DEL PROCEDIMENTO: Ing. Claudio Bondi

PROGETTISTA COORDINATORE: Arch. Michele Berti
PROGETTISTA OPERE EDILI: Arch. Michele Berti
PROGETTISTA IMPIANTI: Ing. Michela Marchetti
COORD. SICUREZZA PROGETTAZIONE: Geom. Angelo Di Paolo
COLLABORATORE DI PROGETTO: Geom. Angelo Di Paolo
COLLABORATORE DI PROGETTO: P. Ind. Roberto Bolognesi
RILIEVO ED ELABORAZIONE GRAFICA: Geom. Miriam Malta

Rev.	Descrizione:	Redatto:	Controllato	Approvato	Data:

IMPIANTI IDRICO-SANITARIO CONDIZIONAMENTO ED ANTINCENDIO

DISTRIBUZIONE ACQUA CALDA ED ACQUA REFRIGERATA PARTICOLARI COSTRUTTIVI

Codice Intervento:	Codice Edificio:	Codice Fase:	Codice Elaborato:
2016/06.05/214	C023	D/E	F-230
Scala:	File: C023_2016-06-05-2014_DE_F230-R0.dwg	Data: 01/08/2016	Revisione: R0