



BRD NEW MATERIALS (MALAYSIA) SDN. BHD

Steel Floor Deck

INDUSTRIAL BUILDING INSULATION SANDWICH PANEL

BRD Group

BRD Group

BRD NEW MATERIALS (MALAYSIA) SDN.BHD

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About US 关于我们

在过去的21年， 宝润达致力于打造高品质的产品，提供建筑内、外饰面的解决方案，向客户提供优质、安全、环保的建筑材料解决方案，从产品、设计、技术、销售、施工等全方位满足您的需求。我们的团队不断以提高标准要求自己，我们以打造品质一流、效益一流、管理一流的现代化企业为目标，致力于新型节能产品的开发，拥有独立自主生产技术知识产权专利，引进德国技术采用进口主材，秉承“致力于成为受尊敬和具有可持续发展能力的企业”为企业愿景，

坚持“以工业品创新和流通促进社会资源的集约利用”为企业使命，不断开拓创新，推动建筑装饰行业向绿色、低碳、健康、环保、节能的方向发展。



In the past 21 years, BRD committed is to creating high-quality products, internal, external finishes of solutions, to provide customers with high quality, safe, environmentally friendly building materials solutions, to meet all your needs from product design, technology, sales and construction. Our team continues to improve the standards themselves, and we have to build a first-class quality, first-class benefits, first-class modern enterprise management as the goal, We are committed to the development of new energy-saving products, with independent intellectual property patents production technology, the introduction of German technology imported main material adhering to the "committed to being respected and have capacity for sustainable development of enterprises" for enterprise vision,

Adhere to the "promotion of industrial innovation and circulation of the intensive use of social resources" for enterprise mission, continuous innovation; promote the building decoration industry to a green, low carbon, health, environmental protection, energy saving direction

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公司简介

Company profile

BRD成立于1995年，位于马来西亚雪兰莪州的巴生，是一家现代股份制企业，根据上市公司的要求进行运营.BRD集科研，开发，制造，销售和服务于一体，拥有专业的制造，技术 职能研究和营销团队，致力于在装饰，节能及其他相关产品的应用和开发方面培养一个优秀的企业。

BRD was founded in 11995 and located in Kapar, Selangor, Malaysia, is a modern joint-stock enterprise operating according to the requirements of publicly-listed company. Integrating scientific research, development, manufacturing, sales and service, BRD has professional manufacturing, technology, functional research and marketing team, committing to fostering one excellent enterprise in the application and development of decoration, energy-saving and other related products.

BRD新材料（马来西亚）有限公司 是BRDECO集团在马来西亚的分支机构。 主要产品包括：夹芯板，冷藏室系统，洁净室系统，涂料，车库门，工业门，钢桁架甲板等建筑材料。 作为中国大型的新型节能建材生产基地，BRD依靠全球营销网络的辐射为用户提供及时，细致和全面的服务，并努力成为一家社会和用户信任的全球企业。

BRD NEW MATERIALS(MALAYSIA)SDN.BHD. is a branch of BRDECO Group in Malaysia. The main products include: sandwich panel, cold room system, clean room system, coating, garage door, industrial door, steel truss deck and other building material. As a large new energy-saving building materials production base in China, BRD relies on the radiation of global marketing network to provide users with timely, meticulous and comprehensive services, and it strives to become a social and user-trusted global enterprise.









宝润达钢筋桁架生产线优势

The Advantages of Advanced Production Line

宝润达钢筋桁架生产线是集钢筋盘条放线、钢筋矫直、侧筋折弯、焊接成型。自动剪切。成品集料于一体的全自动化生产线。

1．主机采用6.85米长整体机架，整体电动上下调整，满足不同高度钢筋桁架焊接需要。

2．独家采用单排多点的焊接专利技术，100%双保险

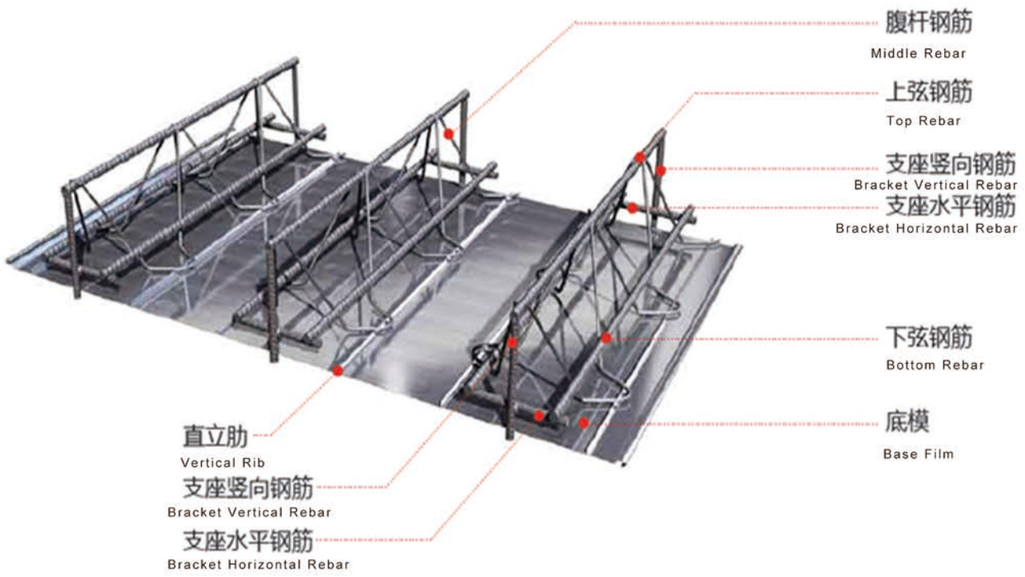
Our production line of steel truss deck is a set of steel wire rod lines, straightening steel, side rib bending, and welding molding. Automatically cut. Finished aggregate in one of the fully automated production lines.

1. Adopt a 6.85 meters' long overall rack, electric adjustment a whole, satisfies the different high truss girder welding needs.
2. Exclusive use of patented welding technology of single point, 100% DS









钢筋桁架板介绍

Steel Truss Deck Introduction

目前一般多高层建筑采用钢筋楼承板的特点一般采用带一定肋高的压型钢板—混凝土组合楼板。使用这种楼板的不足：建筑物室内净高减小、楼板下钢筋绑扎繁琐，钢筋间距及混凝土保护层厚度不好控制、防腐维护及抗火时限都存在一定问题。

由此诞生了新型材料-钢筋桁架楼承板。

钢筋桁架楼承板是将楼承板中钢筋在工厂加工成钢筋桁架，并将钢筋桁架与镀锌压型钢板焊接成一体的组合模板。钢筋桁架楼承板分为钢筋桁架部分和压型钢板共两部分组成。

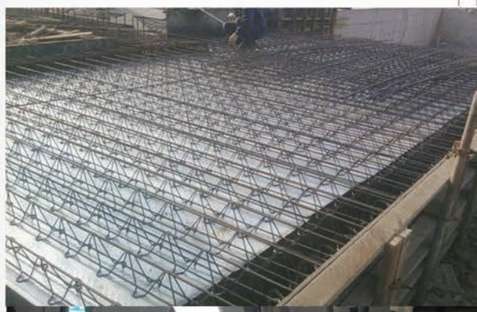
Current general characteristics of high-rise building with reinforced deck with some of profiled steel sheeting-concrete composite slabs with high rib.

This lack of floor: ceiling height decreases, floor reinforcement of buildings complex, bar spacing and thickness of concrete protective layer control, preventive maintenance and fire resistance period there are some problems.

This has given birth to new material-steel bar truss slab.

Steel bar truss slab deck is reinforced in the factory processed into steel truss andsteel truss and galvanized profiled steel plate welded into one composite template. Steel bar truss slab into truss parts and pressure plate consists of two parts.







钢筋桁架

—提供楼板施工阶段的刚度

—代替楼板使用阶段的受力钢筋

—钢筋直径可调,桁架高度可调

Steel bar truss

-Provide the stiffness of slab at construction stage

-Replace the floor using reinforcement

-Diameter adjustable truss height-adjustable

压型钢板

—作为楼板施工阶段的模板

—在楼板使用阶段不参与受力，属非组合楼板类型

—厚度为0.5mm，板型利用率为93%

Pressure plate

-As a template for floor construction phase

-Cannot participate in force-floor stage,

non-composite floor type

-Thickness of 0.5mm, plate-type 93% utilization

与以往的楼板施工方法不同，在建设现场，可以将钢筋桁架楼承板直接铺设在钢梁上，然后进行简单的钢筋工程，便可浇注混凝土，提高了楼板施工效率。

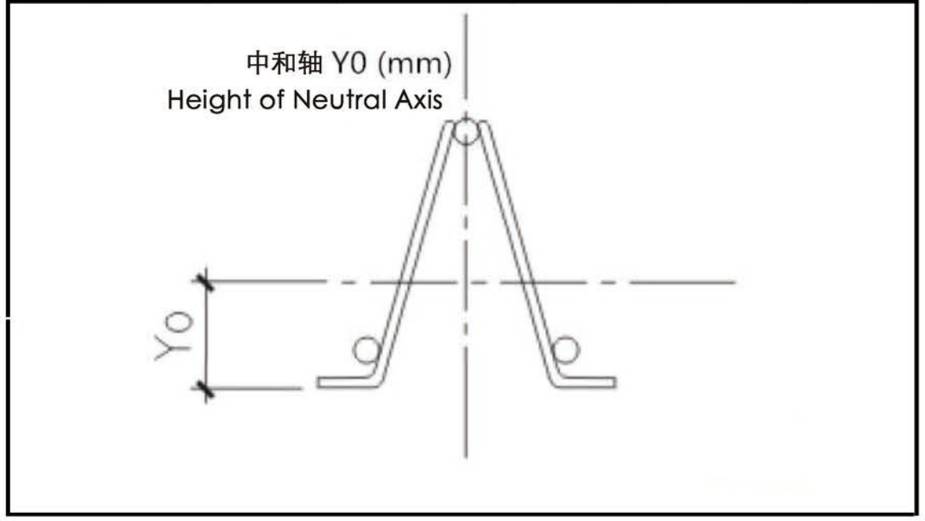
Different from the previous floor construction methods, construction site, steel bar truss slab can be laid directly on the steel beams and simple reinforcement, you can pour concrete, improve the efficiency of floor construction.

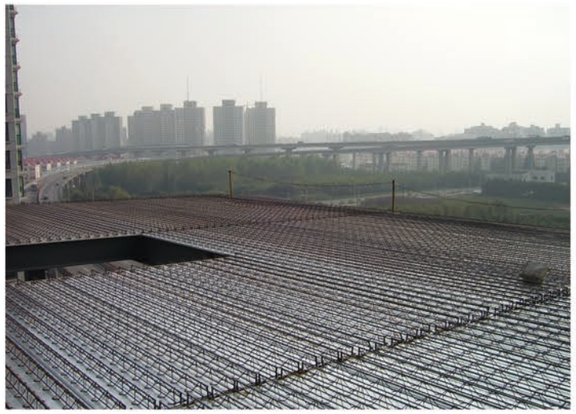


钢筋桁架板参数 Steel Truss Deck Parameter List

576-type steel truss floor deck model table					
Model	Height of truss (mm)	Diameter of top/middle/bottom steel bar (mm)	Height of neutral axis Y_0 (mm)	Moment of inertia($x10^5$ mm^4)	Thickness of floor (mm)
TD1-70-576	70	8, 4.5, 6	47.65	1.059	100
TD1-80-576	80		52.35	1.421	110
TD1-90-576	90		57.06	1.837	120
TD1-100-576	100		61.77	2.305	130
TD1-110-576	110	8, 4.5, 6	66.47	2.826	140
TD1-120-576	120		71.18	3.401	150
TD2-70-576	70	8, 4.5, 6	39.67	1.294	100
TD2-80-576	80	8, 4.5, 6	43.00	1.743	110
TD2-90-576	90		46.33	2.259	120
TD2-100-576	100		49.67	2.842	130
TD2-110-576	110		53.00	3.492	140
TD2-120-576	120	8, 5, 6	56.33	4.21	150
TD2-130-576	130		59.67	4.994	160
TD2-140-576	140		63	5.845	170
TD2-150-576	150		66.33	6.763	180
TD2-160-576	160	8, 5.5, 8	69.67	7.748	190
TD2-170-576	170		73	8.8	200
TD3-70-576	70	10, 4.5, 8	45.75	1.65	100
TD3-80-576	80		50.14	2.232	110
TD3-90-576	90		54.53	2.902	120
TD3-100-576	100		58.91	3.66	130
TD3-110-576	110	10, 5, 8	63.3	4.507	140
TD3-120-576	120		67.68	5.442	150
TD3-130-576	130		72.07	6.465	160
TD3-140-576	140	10, 5.5, 8	76.46	7.576	170
TD3-150-576	150		80.84	8.775	180
TD3-160-576	160		85.23	10.062	190
TD3-170-576	170	10, 6, 8	89.61	11.438	200
TD4-70-576	70	10, 4.5, 10	40	1.9	100
TD4-80-576	80		43.33	2.58	110
TD4-90-576	90		46.67	3.366	120
TD4-100-576	100	10, 5, 10	50	4.256	130
TD4-110-576	110		53.33	5.251	140
TD4-120-576	120		56.67	6.35	150
TD4-130-576	130		60	7.555	160
TD4-140-576	140	10, 5.5, 10	63.33	8.864	170
TD4-150-576	150		66.67	10.277	180
TD4-160-576	160		70	11.796	190
TD4-170(2)-576	170	10, 5.5, 10	73.33	13.419	200
TD4-180(2)-576	180		76.67	15.144	210
TD4-190(2)-576	190		80	16.971	220
TD4-170-576	170		73.33	13.419	200
TD4-180-576	180		76.67	15.144	210
TD4-190-576	190		80	16.971	220
TD4-200-576	200	10, 6, 10	83.33	18.907	230
TD4-210-576	210		86.67	20.948	240
TD4-220-576	220		90	23.094	250
TD4-230-576	230		93.33	25.344	260
TD5-70-576	70	12, 4.5, 8	50.77	1.93	100
TD5-80-576	80		56.06	2.622	110
TD5-90-576	90		61.35	3.42	120
TD5-100-576	100		66.65	4.325	130
TD5-110-576	110	12, 5, 8	71.94	5.336	140
TD5-120-576	120		77.24	6.454	150
TD5-130-576	130		82.53	7.678	160
TD5-140-576	140	12, 5.5, 8	87.82	9.009	170
TD5-150-576	150		93.12	10.446	180
TD5-160(2)-576	160	12, 5.5, 8	98.41	11.989	190
TD5-170(2)-576	170		103.71	13.639	200
TD5-180(2)-576	180		109	15.388	210
TD5-190(2)-576	190		114.29	17.249	220
TD5-160-576	160	12, 6, 8	98.41	11.989	190
TD5-170-576	170		103.71	13.639	200
TD5-180-576	180		109	15.388	210
TD5-190-576	190		114.29	17.249	220
TD5-200-576	200		119.59	19.218	230
TD5-210-576	210		124.88	21.292	240
TD5-220-576	220		130.17	23.473	250
TD5-230-576	230		135.47	25.761	260
TD6-70-576	70	12, 4.5, 10	44.7	2.309	100
TD6-80-576	80		48.88	3.151	110
TD6-90-576	90	12, 5, 10	53.07	4.124	120
TD6-100-576	100		57.26	5.228	130
TD6-110-576	110		61.44	6.465	140
TD6-120-576	120	12, 5.5, 10	65.63	7.832	150
TD6-130-576	130		69.81	9.331	160
TD6-140-576	140		74	10.962	170
TD6-150(2)-576	150	12, 5.5, 10	78.19	12.728	180
TD6-160(2)-576	160		82.37	14.618	190
TD6-170(2)-576	170		86.56	16.643	200
TD6-180(2)-576	180		90.74	18.791	210
TD6-190(2)-576	190		94.93	21.078	220
TD6-150-576	150	12, 6, 10	78.19	12.724	180
TD6-160-576	160		85.37	14.618	190
TD6-170-576	170		86.56	16.643	200
TD6-180-576	180		90.74	18.791	210
TD6-190-576	190		94.96	21.078	220
TD6-200-576	200		99.12	23.496	230
TD6-210-576	210		103.3	26.046	240
TD6-220-576	220		107.49	28.728	250
TD6-230-576	230		111.67	31.54	260
TD7-70-576	70	12, 4.5, 12	40.33	2.567	100
TD7-80-576	80		43.67	3.517	110
TD7-90-576	90	12, 5, 12	47	4.618	120
TD7-100-576	100		50.33	5.869	130

TD7-110-576	110		53.67	7.272	140
TD7-120-576	120	12, 5.5, 12	57	8.825	150
TD7-130-576	130		60.33	10.529	160
TD7-140-576	140		63.67	12.384	170
TD7-150(2)-576	150	12, 5.5, 12	67	14.389	180
TD7-160(2)-576	160		70.33	16.546	190
TD7-170(2)-576	170		73.67	18.853	200
TD7-180(2)-576	180		77	21.3	210
TD7-190(2)-576	190		80.33	23.908	220
TD7-150-576	150	12, 6, 12	67	14.389	180
TD7-160-576	160		70.33	16.546	190
TD7-170-576	170		73.67	18.853	200
TD7-180-576	180		77	21.3	210
TD7-190-576	190		80.33	23.908	220
TD7-200-576	200		83.67	26.666	230
TD7-210-576	210		87	29.575	240
TD7-220-576	220		90.33	32.634	250
TD7-230-576	230		93.67	35.845	260





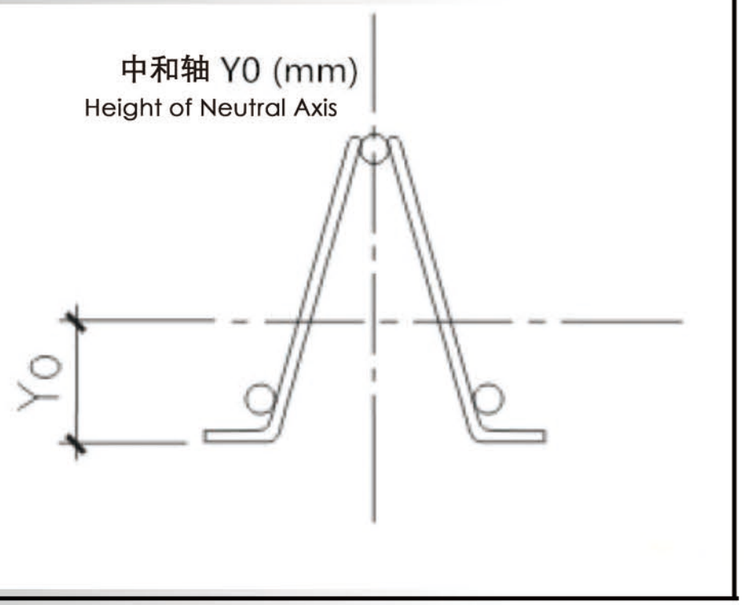


600-type steel truss floor deck model table

Model	Height of truss (mm)	Diameter of top/middle/bottom steel bar (mm)	Height of neutral axis Y_0 (mm)	Moment of inertia($x10^5$ mm^4)	Thickness of floor (mm)
TD1-70-600	70	8, 4.5, 6	47.65	1.059	100
TD1-80-600	80		52.35	1.421	110
TD1-90-600	90		57.06	1.837	120
TD1-100-600	100		61.77	2.305	130
TD1-110-600	110	8, 4.5, 6	66.47	2.826	140
TD1-120-600	120		71.18	3.401	150
TD2-70-600	70	8, 4.5, 6	39.67	1.294	100
TD2-80-600	80	8, 4.5, 6	43.00	1.743	110
TD2-90-600	90		46.33	2.259	120
TD2-100-600	100		49.67	2.842	130
TD2-110-600	110		53.00	3.492	140
TD2-120-600	120	8, 5, 6	56.33	4.21	150
TD2-130-600	130		59.67	4.994	160
TD2-140-600	140		63	5.845	170
TD2-150-600	150		66.33	6.763	180
TD2-160-600	160	8, 5.5, 8	69.67	7.748	190
TD2-170-600	170		73	8.8	200
TD3-70-600	70	10, 4.5, 8	45.75	1.65	100
TD3-80-600	80		50.14	2.232	110
TD3-90-600	90		54.53	2.902	120
TD3-100-600	100		58.91	3.66	130
TD3-110-600	110	10, 5, 8	63.3	4.507	140
TD3-120-600	120		67.68	5.442	150
TD3-130-600	130		72.07	6.465	160
TD3-140-600	140	10, 5.5, 8	76.46	7.576	170
TD3-150-600	150		80.84	8.775	180
TD3-160-600	160		85.23	10.062	190
TD3-170-600	170	10, 6, 8	89.61	11.438	200
TD4-70-600	70	10, 4.5, 10	40	1.9	100
TD4-80-600	80		43.33	2.58	110
TD4-90-600	90		46.67	3.366	120
TD4-100-600	100	10, 5, 10	50	4.256	130
TD4-110-600	110		53.33	5.251	140
TD4-120-600	120		56.67	6.35	150
TD4-130-600	130		60	7.555	160
TD4-140-600	140	10, 5.5, 10	63.33	8.864	170
TD4-150-600	150		66.67	10.277	180
TD4-160-600	160		70	11.796	190
TD4-170(2)-600	170	10, 5.5, 10	73.33	13.419	200
TD4-180(2)-600	180		76.67	15.144	210
TD4-170-600	170	10, 6, 10	73.33	13.419	200
TD4-180-600	180		76.67	15.144	210
TD4-190-600	190		80	16.971	220
TD4-200-600	200		83.33	18.907	230

TD4-210-600	210		86.67	20.948	240
TD4-220-600	220		90	23.094	250
TD4-230-600	230		93.33	25.344	260
TD5-70-600	70	12, 4.5, 8	50.77	1.93	100
TD5-80-600	80		56.06	2.622	110
TD5-90-600	90		61.35	3.42	120
TD5-100-600	100		66.65	4.325	130
TD5-110-600	110	12, 5, 8	71.94	5.336	140
TD5-120-600	120		77.24	6.454	150
TD5-130-600	130		82.53	7.678	160
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TD5-160(2)-600	160	12, 5.5, 8	98.41	11.989	190
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TD5-180(2)-600	180		109	15.388	210
TD5-160-600	160	12, 6, 8	98.41	11.989	190
TD5-170-600	170		103.71	13.639	200
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TD5-220-600	220		130.17	23.473	250
TD5-230-600	230		135.47	25.761	260
TD6-70-600	70	12, 4.5, 10	44.7	2.309	100
TD6-80-600	80		48.88	3.151	110
TD6-90-600	90	12, 5, 10	53.07	4.124	120
TD6-100-600	100		57.26	5.228	130
TD6-110-600	110		61.44	6.465	140
TD6-120-600	120	12, 5.5, 10	65.63	7.832	150
TD6-130-600	130		69.81	9.331	160
TD6-140-600	140		74	10.962	170
TD6-150(2)-600	150	12, 5.5, 10	78.19	12.728	180
TD6-160(2)-600	160		82.37	14.618	190
TD6-170(2)-600	170		86.56	16.643	200
TD6-180(2)-600	180		90.74	18.791	210
TD6-150-600	150	12, 6, 10	78.19	12.724	180
TD6-160-600	160		85.37	14.618	190
TD6-170-600	170		86.56	16.643	200
TD6-180-600	180		90.74	18.791	210
TD6-190-600	190		94.96	21.078	220
TD6-200-600	200		99.12	23.496	230
TD6-210-600	210		103.3	26.046	240
TD6-220-600	220		107.49	28.728	250
TD6-230-600	230		111.67	31.54	260
TD7-70-600	70	12, 4.5, 12	40.33	2.567	100
TD7-80-600	80		43.67	3.517	110
TD7-90-600	90	12, 5, 12	47	4.618	120
TD7-100-600	100		50.33	5.869	130
TD7-110-600	110		53.67	7.272	140
TD7-120-600	120	12, 5.5, 12	57	8.825	150
TD7-130-600	130		60.33	10.529	160

TD7-140-600	140		63.67	12.384	170
TD7-150(2)-600	150	12, 5.5, 12	67	14.389	180
TD7-160(2)-600	160		70.33	16.546	190
TD7-170(2)-600	170		73.67	18.853	200
TD7-180(2)-600	180		77	21.3	210
TD7-190(2)-600	190		80.33	23.908	220
TD7-150-600	150	12, 6, 12	67	14.389	180
TD7-160-600	160		70.33	16.546	190
TD7-170-600	170		73.67	18.853	200
TD7-180-600	180		77	21.3	210
TD7-190-600	190		80.33	23.908	220
TD7-200-600	200		83.67	26.666	230
TD7-210-600	210		87	29.575	240
TD7-220-600	220		90.33	32.634	250
TD7-230-600	230		93.67	35.845	260







钢筋桁架板优势

Advantage of Steel Truss Deck

经济 Economy

●钢筋桁架楼承板受力模式合理，选材经济，综合造价优势明显Steel bar truss slab model is reasonable, material economy, integrated cost advantages

●可设计为双向板Can be designed for two-way slabs

●可调整桁架高度和钢筋直径拟适用于跨度较大的楼板便捷Adjustable truss height and diameter to be used to span larger convenient floor

便捷 Convenient

●现场钢筋绑扎工作量可减少60%—70%，现场钢筋绑扎量在3-5kg/m²之间，可进一步缩短工期。Reinforcement work can be reduced by 60%-70%, steel Reinforcement binding between 3-5kg/m ² can further shorten the duration.

●桁架受力模式可以提供更大的楼承板刚度，可大大减少或无需用施工用临时支撑。Truss model provides greater stiffness of the deck, large Reduced or no False work for construction.



安全 Safe

●力学性能与传统现浇楼板基本相同，楼承板抗裂性能好。Basically the same mechanical properties and traditional in-situ floor slab and deck cracking resistance performance is good

●耐火性能与传统现浇楼板相当，优于压型钢板组合楼板。Fire performance comparable with traditional in-situ floor slab, is superior to the profiled steel sheeting composite slab

●底模不参与使用阶段受力，不需考虑耐火防腐问题。Bottom not involved in using force, not fire-resistant corrosion protection issues considered

可靠Reliable

●钢筋排列均匀，上下层钢筋间距及钢筋保护层厚度有可靠保证。Steel bar arrangement, a reliable guarantee of spacing between upper and lower reinforcement and thickness of reinforcement protection layer

●楼承板双向刚度相近，有利于建筑物抗震。Deck bi-directional stiffness similar can add earthquake resistant.

●栓钉焊接质量更容易保证。Stud welding can assurance quality



钢筋桁架楼承板PK普通压型楼承板经济方案比较

Steel Truss Deck PK Traditional Floor Boards about Economic Comparison Program

1、钢筋桁架楼承板方案

Steel Truss Deck Floor Boards Costs:

方案设计：选用TD2-90（120厚楼板），施工阶段无支撑最大跨度为2m。现场钢筋配置约1.97Kg/m2。

Design: use TD2-90 (120 thick slab), the construction phase of the largest unsupported span of 2m. Sit bar arrangement about 1.97Kg / m2.

以下节点为120mm厚楼板配筋方案

Following nodes are 120mm thick slab reinforcement program:

价格分析 Price analysis:

A、钢筋桁架楼承板费用 Steel plate Costs:

模板型号	模板单价	模板平均单价
Type	Unit Pr (RMB/ m)	Avg unit pr(RMB/m2)
TD2-90	33	57.3

B、混凝土费用 Concrete costs:

混凝土用量	混凝土单价	混凝土费用
Amount(m3/m2)	Unit pr(元/m3)	Costs(元/m2)
0.12	230	27.6

C、现场钢筋费用 Steel costs:

现场钢筋用量 Amount(kg/m2)	现场钢筋单价 Unit pr(元/kg)	现场钢筋用量 Costs(元/m2)
1.97	2	3.88

采用钢筋桁架楼承板的费用总计 Steel truss deck total costs:

楼承板价格+混凝土费用+现场钢筋+临时支撑

Steel plate Costs+Concrete costs+Steel costs+Temporary support costs

= 57.3+27.6+3.88=88.78(RMB/m2)

2、普通压型钢承板方案 Traditional Steel Plate Program:

方案设计Design：选用915型压型钢板，肋高75mm，钢板厚度为1.0mm，楼板厚度为150mm，现场钢筋配置约16.75 Kg/m2。

use 915 steel plate, rib height is 75mm, sheet thickness is 1.0mm, the thickness of the slab is 150mm, and site bar arrangement is about 16.75 Kg / m2.

以下节点为150m厚普通钢承板配筋方案 The following node is common 150m thick steel plate reinforcement program:

普通压型钢承板价格分析 Traditional steel plate price analysis:

A、钢承板费用 Steel plate costs:

钢承板型号	钢承板单价	钢承板平均单价
Type	Unit pr(RMB/m2)	Avg unit pr(RMB/m2)
915（1.0mm）	28	30.

B、混凝土费用Concrete costs:

混凝土用量	混凝土单价	混凝土费用
Amounts(m³/㎡)	Unit pr(RMB/m³)	Costs(RMB/m³)
0.113	230	25.99

C、现场钢筋费用Concrete costs:

现场钢筋用量	现场钢筋单价	现场钢筋用量
Amounts(kg/m2)	Unit pr(RMB/kg)	Costs(RMB/m2)
16.75	2	33.5

D、焊钉费用Welding nails costs:

现场焊钉用量	现场焊钉单价	现场焊钉用量
Amounts(kg/m2)	Unit pr(RMB/kg)	Costs(RMB/m2)
1.2	4	4.8

采用普通压型钢承板的费用总计：

钢承板价格+混凝土费用+现场钢筋+焊钉+绑扎钢筋人工费用

Steel plate Costs+Concrete costs+Steel costs+Welding nails costs+workers costs

= 30+25.99.16+33.5+4.8+5=94.29(RMB/m2)

综合经济成本比较结果

Comprehensive Economic Cost Comparison Results:

Program	Comprehensive cost （RMB/㎡）	Price difference
Steel truss deck	88.78	5.51
Traditional steel plate	94.29	
Improve the efficiency of the installation time by 50% financial cost 7 RMB/㎡		12.51

钢筋桁架楼承板施工工艺

Construction Technology of Steel Truss Deck

（1）实现了机械化生产，有利于钢筋排列，间距均匀、混凝土保护层厚度一致，提高了楼板的施工质量。

（2）钢筋排列均匀，受力模式合理，可大大减少临时支撑。双折边扣边搭接设计，有效组合楼板，保障施工质量。

（3）装配式钢筋桁架楼承板可显著减少现场60%-70% 钢筋绑扎工程量，加快施工进度，增加施工安全保证，符合国家节能环保的要求。

（4）该产品通过浙江大学土木工程测试中心检测，并经过多项工程应用，力学性能，耐火性能与传统现浇楼板等同，可以满足现浇钢筋混凝土楼承板承载力和变形的要求。

(1) Achieved the mechanized production, which is conducive to arrange steel spacing uniform, consistent of concrete cover thickness, and to improve construction quality of the floor.

(2) Uniform arrangement of reinforcement, mechanical model is reasonable, can greatly reduce the temporary support.

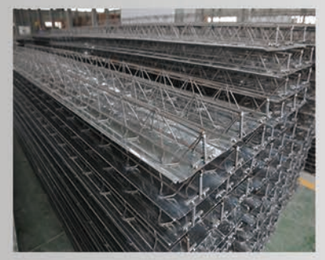
(3) Steel truss deck plate could significantly reduce the of 60% -70% live steel banding engineering, construction progress, increase construction safety assurance, in line with national energy conservation and environmental protection requirements.

(4) The product is tested by Zhejiang University Civil Engineering Test Center, and after a number of engineering applications, mechanical properties, fire resistance equivalent to traditional casting slab meet situ reinforced concrete floor plate bearing capacity and deformation requirements.



钢筋桁架板施工过程

Steel Truss Deck Construction Process



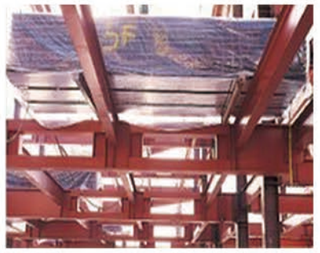
1. 生产完毕待运输

Truss deck in factory



2. 吊运

Hoist



3. 现场堆放

Stack on site



4. 现场铺设

Install on site



5. 竖向支座钢筋电焊

Point welding the vertical bracket rebar



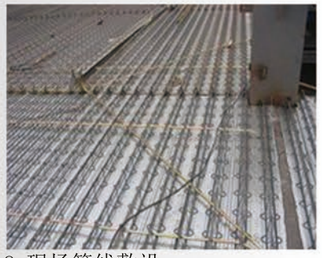
6. 栓钉焊接

Weld bolts



7. 边模板安装

Install side templates



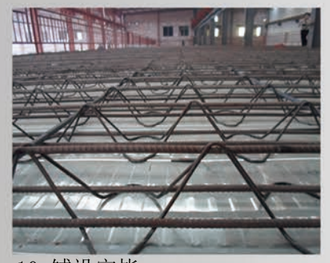
8. 现场管线敷设

Lay out the pipe on site



9. 现场附加钢筋绑扎

Binding the extra rebar on site



10. 铺设完毕

Binding finish



11.浇筑混凝土

Placing concrete



12. 浇筑完成底部效果

Bottom effects after placing concrete

钢筋桁架楼承板施工注意事项

Steel Truss Deck Construction Attention

1.工地材料暂存-楼承板材料应尽量配合现场施工需要的进度送抵工地，若需要现场储放时，应成捆离地斜放以免积水，并应采用通风良好的遮盖方式覆盖以防钢结构表面结露。

2.吊放及铺设--楼承板应按照经核准的铺设图施工。楼承板成捆堆置在结构物上时应注意结构杆件的设计支撑强度，避免超过结构杆件的允许设计荷重。铺设前，应先确定钢梁上翼板面上的吊耳是否已割除磨平。

3. 现场切割--工地现场所需楼承板的切割工作，无论是斜边、切角、超长、预留孔等，均应使用电离气切割机，避免破坏钢板表面镀层处理。如使用氧气乙炔或其它方式切割，应在切割口缘涂上富锌防锈漆，防止锈蚀。切割现场应备有灭火器以备不时之需。

4.固定-钢承板在定位后应以火药击钉，或用自攻螺丝将楼承板固接在结构杆件上；如采用熔焊方式固定，则应随后在焊点上进行除渣及补漆（富锌防锈漆）工作，以免接点锈蚀。楼承板侧向与钢构件搭接处，或楼承板与楼承板侧向搭接处，均需在跨间或90公分间距（最大值）即需有一处侧接固定（采用#10以上的自攻螺丝）。

5.屋面材料安装-屋面材料（诸如：隔热材，防水卷材，或屋面压型板等）安装前，需先清除楼承板面上的积水、污物、灰尘等。

6.铺设-楼承板铺设前，应先确定梁侧模顶面是否平整，有无未拔出的铁钉、未清除的水泥块或异物，必须确定楼承板可以很平整、密合的搭在梁侧模上，以免浇置混凝土时产生漏浆，或将来拆模时水泥块附着在楼承板面上，产生额外不必要的清除工作。

7.拆除板底支撑--板底临时支撑需混凝土达到75%以上的设计强度才可拆除。

1. Site material temporary storage--Floor deck material should be sent to work site coordinating with the need of site construction progress. If storage on site is needed , they should be bundled up and inclined put above the ground to avoid water logging, and also should be covered in good ventilation way to avoid condensation.

2. Life-up and laid--Floor deck should be constructed according to the checked laying diagram. In order to avoid exceeding allowable designed load of structure bar, the designing strength of structure bar should be noted when floor decks are piled up on structures in bundles. It should be made sure that whether the lifting ear of wing panel on the girder has been cut and and rubbed.

3. Cutting on site--In order to avoid steel coating surface treatment, the floor deck cutting needed on working site, including beveling, corner cutting, over lengthening, preparing hole etc.,should use ionization gas cutting machine. If oxy-acetylene or other ways be adopted, rich zinc anti-rust paint should be coated on cut edge to avoid corrosion.

4. Anchorage--Floor deck should be stricken nailed with gunpowder, or fixed onto structure bar with self-tapping screws when it is positioned. If being fixed in welding way, slag work or painting make-up(rich zinc anti-rust paint) work should be done on welding points in order to avoid their rusting. At the lapping zone of floor deck lateral and steel members, or the lapping zone of floor deck lateral, during the span or 90cm space (maximum) there should be a siding joint fixed (#10 or above self-tapping screw should be adopted).

5. Installation of roofing materials--Before the installation of roofing materials (such as insulation materials, waterproof materials, or roof profiled plate etc.), the pounding, sewage, dust etc. should be cleared.

6.Paving--Before the pavement of floor deck, it should be made sure whether the top of side beam is even, whether there is any nails not pulled out, or any not eliminated concrete block or other things. Floor deck should be able to put on the side beam evenly and closely, in order to avoid leakage when concreting or generating extra unnecessary clearing work for the concrete blocks attached onto the floor deck when removing in the future.

7. Removing the slab-bottom supports--The temporary slab-bottom support can be removed when the design strength that concrete is more than 75%.

工程案例 Projects

