

## Toray lands 1 trillion yen carbon fiber order from Boeing



John Tracy, senior vice president of Engineering, Operations & Technology at Boeing Co., right, speaks as Akihiro Nikkaku, president of Toray Industries Inc., looks on during a news conference in Tokyo, Japan, on Nov. 17, 2014.

1) TOKYO -- Toray Industries will supply carbon fiber for Boeing's 787 Dreamliner and 777x next-generation large passenger jet under a long-term contract they recently agreed on.

2) The order's worth is estimated at more than 1 trillion yen (\$8.53 billion), the largest sum ever for a contract between Toray and Boeing.

3) They agreed to renew their existing supply contract, worth 700 billion yen and covering the period between 2006 and 2021. A new contract, running for more than 10 years starting in 2014, will be formally signed as early as this year.

4) Toray already provides carbon fiber composite materials for the 787. The Japanese company will also supply these materials for the main wing of the 777x, which Boeing plans to start delivering to airlines in 2020. The 777x features a larger main wing than the current 777 model and boosts fuel efficiency by 20%. Boeing has already secured orders for nearly 300 units from airlines, including ANA Holdings.

5) Boeing said it expects to purchase \$36 billion in goods and services from Japan by the end of the decade. In June, it said it had retained Mitsubishi Heavy Industries Ltd. and Kawasaki Heavy Industries Ltd., as part of a consortium of five Japanese firms that will provide parts for over a fifth of its 777X model.

6) Toray, the global leader in the carbon fiber market, produces the material at such locations as Japan's Ehime Prefecture and in the U.S. state of Alabama. It plans to spend 100 billion yen to build another U.S. plant, in South Carolina, and start operating it as early as 2017.

7) The company will initially invest about 60 billion yen over three years in the new plant to install a production line capable of making 3,000 to 4,000 tons of fiber a year. It will add lines by 2020 to bring output there close to the Ehime plant's annual 8,000 tons.

8) Toray plans to raise its annual production capacity worldwide by 50% from 2012 to 27,000 tons next year. The new order will help raise this figure to 35,000 tons, which could push the company's global market share above 50% in terms of output.

9) Its carbon fiber business is expected to generate sales of 165 billion yen for the year ending in March, up 46% from fiscal 2013 and accounting for 8% of overall sales.【November 17, 2014/ Nikkei (5 パラ目は Bloomberg より)】

4) composite: 複合の、混合の

☆Ice breaker for active discussion☆

1) Are you familiar with Toray Industries? Please share your knowledge about it.

2) Do you know much about carbon fiber? What are the characteristics of carbon fiber? Cite examples of products/applications for carbon fiber.

3) What other aircraft manufacturers do you know besides Boeing? Are you particular about the airplane when flying?

4) How does the quality of aircrafts and airline services affect tourism?

5) Toray is planning to build a new plant in South Carolina. How does a company's expansion affect the economy of its locality?

6) Do you think it's alright for Boeing to get supplies from different sources in making their planes?

7) Give the meaning and use each of the following words in a sentence: carbon fiber, contract, existing, cover, composite, capable, account for, output and consortium.

炭素繊維は自動車部品やテニスラケット、ゴルフクラブのシャフト、風力発電の風車や人工衛星などにも使われている。その開発の歴史は古く、1960年代に始まって欧米の化学大手を含め多くの企業が実用化にチャレンジした。だが、投資に見合う十分な需要がなかなか確保されず、開発競争に生き残ったのは日本勢だった。最大手の東レに加えて世界シェア 12 パーセントで 2 位の帝人、9 パーセントで 3 位の三菱レイヨンの日系 3 社で世界シェアのおよそ 5 割を握っている。東レの炭素繊維事業の売り上げは 2015 年 3 月期見通しで 1650 億円、東レの売り上げ全体の 8 パーセントだが、ボーイングからの受注拡大で 2020 年にはおよそ 3000 億円、全売上高の 1 割を稼ぐ事業になる見込みだという。